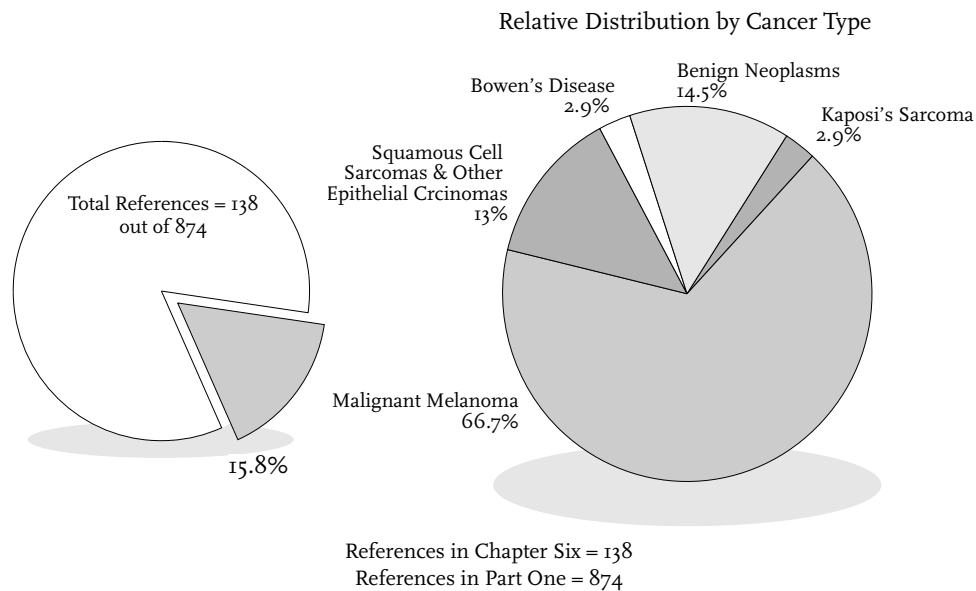


6. Remission of Neoplasms of the Skin



Remission of Neoplasms of the Skin



Cancers of the skin account for 5.4% of the cases of cancer reported by participating tumor registries to the SEER (Surveillance, Epidemiology, and End Results) Program between 1983 to 1987. Incidence data show that malignant melanoma and other skin cancers comprised 2.7% each of all cancers reported during those years. The relative five-year survival rates (%) for the years 1981-1986 for skin cancers are 81.1% for malignant melanoma, and 43% for other skin cancers. Mortality data show that malignant melanoma accounts for 1.2% of all the mortality cases reported to the SEER Program between 1983 and 1987 (Cancer Statistics Review 1973-1987 published by the National Cancer Institute).

Of the 138 references in Chapter 6, 33 are annotated with summaries. Some annotated references also contain 1 or more case reports. References to malignant melanoma comprise 13 of the annotated references. There are 105 supplemental references in the chapter the majority of which, 79 references, provide additional research materials on malignant melanoma. Full text of 22 case reports is presented, 11 of which present cases of spontaneous regression of malignant melanoma.

A summary of the chapter contents is presented in Table One. A comparative analysis of cases reported in previous literature reviews is presented in Table Two.

Table One: References and Case Reports in Chapter Six †

Tumor Type	References (number)	Cases (number)	Cases (%)
Kaposi's Sarcoma	4	2	0.8%
Malignant Melanoma	92	11	4.3%
Squamous Cell & Epitheliomas	18	5	1.9%
Bowen's Disease	4	1	0.4%
Hemangiomas	20	3	1.2%
Totals	138	22	8.6%

† Total number of case reports in Part One is 258.

Table Two: Comparison Between Other Major Literature Reviews of Cases of Spontaneous Regression of Neoplasms of the Skin

Tumor Site/ Type	Rohdenburg (1918) (N=185)	Fauvet (1960) (N=192)	Boyd (1966) (N=97)	Everson (1966) (N=182)	Challis (1990) (N=505)
Kaposi's Sarcoma	0	0	0	0	7
Malignant Melanoma	2	11	11	19	69
Squamous Cell & Epitheliomas	13	6	0	0	5
Bowen's Disease	0	0	0	0	6
Totals	15	17	11	19	87

Kaposi's Sarcoma

Kaposi's Sarcoma

COOK J

Journal of the Royal College of Surgeons of Edinburgh 11: April 1966; 185-195

Extracted Summary

A general overview of Kaposi's sarcoma is given including clinical features, incidence and distribution of the disease, histology and histogenesis, and treatment.

A most interesting feature of Kaposi's sarcoma, and one which makes it almost unique among malignant tumours, is the regular occurrence of spontaneous regression. This is almost always incomplete, but a careful survey of most patients will show regression of individual nodules, even though the disease as a whole may be progressing. Here and there a nodule becomes pale and wrinkled, and gradually disappears, leaving an inconspicuous scar.

Complete spontaneous regression does occur. How often is not known, but two instances in Uganda were carefully observed. One of the patients developed nodules on the left foot in 1951. In early 1952 there were nodules on both feet, but by the end of that year the right foot had cleared and by July 1953 the ulcerated lesions of the left foot had healed and regressed. Three years later no trace of disease was found on clinical, x-ray and biopsy examination.

It is probably not too optimistic to expect a spontaneous remission of clinical value in 2% of all patients, but the duration of follow-up is still too short to call any of the regressions permanent.

Tumor Conference #41

Spontaneously Disappearing Kaposi's Sarcoma

BART RS; KOPF AW

Journal of Dermatologic Surgery and Oncology 8(4): Apr 1982; 257-259

Extracted Summary

A 68-year-old man presented with a lesion on the arch of his foot which was histologically diagnosed as Kaposi's sarcoma (KS). After several weeks the entire lesion disappeared spontaneously without therapy. Spontaneous remission of KS had also occurred 6 years previously. This occurrence of KS with spontaneous regression is rare.

SELECTED CASE REPORT

Tumor Conference (July 17, 1975): Dermatologist A: The patient is a 62-year-old Jewish diabetic white man, who relates that several months ago he had "blue bumps" between the toes of his left foot that disappeared without treatment. About 3 months ago he developed three similar bluish nodules in the arch of his right foot. A biopsy was taken that was interpreted as showing Kaposi's sarcoma. He now presents a biopsy site and two bluish nodules in the skin of the arch of his right foot.

Dermatopathologist: Tumor nodules are present in the dermis, and there is extensive hemorrhage into them. The nodules are made up of spindle cells with numerous vascular channels, not all of which are lined by endothelium. These features are diagnostic of Kaposi's sarcoma.

Radiotherapist: These lesions are radiosensitive.

However, new tumors will probably develop elsewhere. Thus, as a rule, local radiation does not cure the patient. I suggest treating the three nodules with radiation therapy, in one field. A 120-kV apparatus would be used and the beam would have a half-value layer of 3 millimeters of aluminum. I would give 200 to 300 rads daily and take the dose up to about 3,000 rads.

Dermatologist B: It is unusual to see lesions of Kaposi's sarcoma disappear spontaneously, but since Kaposi's sarcoma shows marked variability in its expression, this may have occurred in this patient. On the other hand, perhaps the lesions that disappeared were not Kaposi's sarcoma. Local destruction, as with electrodesiccation and curettage, is effective for some lesions of Kaposi's sarcoma. If his diabetes is under reasonably good

control, I do not believe there should be an unusual problem with wound healing.

Plastic Surgeon: These lesions could be excised and the wounds closed primarily, but he might develop painful scars on the sole of his foot, so it would be preferable to irradiate them.

Dermatologist C: What the patient describes as disappearing lesions may have been tinea pedes. I would use x-ray therapy for the lesions now present.

Dermatologist D: I favor radiation therapy. I would use 170 roentgens three times weekly up to a dose of between 1,000 and 2,000 roentgens, depending on response. The half-value layer would be about 0.8 millimeters of aluminum.

Dermatologist E: I think these lesions can be treated by X-ray therapy. However, I am intrigued by the history that some of them have disappeared spontaneously. Therefore, I might observe the patient for a while before

treatment is given to see if indeed the lesions disappear spontaneously. At this time they are causing him little or no difficulty.

Over the next several weeks the lesions disappeared completely without treatment. The patient remained free of lesions for several years. In January 1981 he presented a 2.5 centimeter indurated, erythematous, tender area on the arch of his left sole, in the center of which was a 1 centimeter keratotic area. The central keratotic area, together with underlying vascular tissue, was removed for histologic study and was microscopically diagnostic of Kaposi's sarcoma. Over the next several weeks the entire lesion disappeared spontaneously. Physical examination and laboratory studies were unremarkable except for an elevated blood sugar of 236 mg/dl and 1+ sugar in his urine. No evidence of Kaposi's sarcoma was found on clinical examination in December 1981.

Spontaneous Regression of Kaposi's Sarcoma

ARCHER CB; SMITH NP; SPITTLE FM
Journal of Cutaneous Pathology 13(1): Feb 1986; 86

Extracted Summary

Spontaneous regression of Kaposi's sarcoma is reported in 3 of 16 patients. Complete spontaneous regression of plaque and nodular lesions on the feet was observed in 2 patients. These lesions did not recur on follow-up for 2 and 3 years respectively. Partial regression of a plaque on the hand occurred in a third patient, but after follow-up of one year the lesion had become more extensive. This plaque subsequently responded to radiotherapy. Spontaneous regression of cancer is well recognized but this phenomenon is less widely appreciated in Kaposi's sarcoma.

Spontaneous Manifestation and Regression of a Kaposi's Sarcoma Under Cyclosporin A Therapy

PILGRIM M
Der Hautarzt 39(6): Jun 1988; 368-370

Extracted Summary

A case of Kaposi sarcoma is reported in a 40-year-old Turk 3 months after a kidney transplantation under immunosuppression with Cyclosporin A and Methylprednisolone. After reduction of immunosuppression, there was complete regression of the sarcoma and the kidney transplant functioned correctly.

SELECTED CASE REPORT

A Turkish teacher, 40 years old, had been dependent on dialysis since March 1981 because of terminal kidney insufficiency with suspected chronic glomerulonephritis.

On June 9, 1984, he received a kidney transplant in the Transplant Center Erlangen-Nuernberg. The transplanted kidney started to function immediately. The basic immunosuppression consisted of Cyclosporin A, 9 mg/kg KG/day; Methylprednisolone, 2 mg/kg KG/day in

descending dosage, after 6 weeks at a dosage of alternating 8 milligrams and 4 milligrams. Additionally, the patient received for the purpose of a prospective study, starting intraoperatively, 20 mg/kg KG/day antilymphocyte globulin of a horse for 14 days.

In September 1984, pinhead-sized bluish-red little nodes appeared around the tip of his nose, the cheeks and temples that increased in size. In November more nodes were discovered in the corner of the right eye and on the

right ear. There were no similar or identical changes around the trunk or the extremities. Likewise, no peripheral lymph node changes were found.

In November 1984, the patient was brought to our clinic for the first time. The clinical diagnosis of Kaposi sarcoma was confirmed by means of a histological examination of one of the angiomatous tumors. (Prof. Dr. G. Pliess, Director of the Pathological Institute of the Clinic Nuernberg) Neither through gastroscopy nor coloscopy could further Kaposi tumors be found.

The following examination of the cytomegalovirus CFR, varicella zoster CFR and the determination of antibodies against HTLV-III were negative. Epstein-Barr

antibodies were normal at 1:160, also herpes simplex CFR at 1:64. The distribution of T subcell population was normal, the number of B lymphocytes and macrophages was slightly reduced. Lymphocyte stimulation was regular.

Consequently the immunosuppression was drastically reduced to 0.6 mg/kg KG/day Cyclosporin A and 4 milligrams Methylprednisolone. After a few weeks the Kaposi sarcomas were reduced in size and regressed completely within 3 months after reduction of the immunosuppressive therapy. To this day, the patient is free of Kaposi sarcoma, his transplanted kidney functions fully, creatinin is at 1.2 mg%. (Noetic Sciences translation)

Malignant Melanoma

Malignant Melanomas *A Clinical Study*

DALAND EM; HOLMES JA

New England Journal of Medicine 220(16): April 20 1939; 651-660

Extracted Summary

Thirty-five case reports are presented along with a description of the treatment procedures used. A number of conclusions based upon the discussions of patient case histories is reported. The prognosis in malignant melanoma is very poor. However, a few patients can be cured by adequate surgery. There is a high incidence of malignant melanomas on the lower extremities, and they represent more than half of the malignant tumors of the skin in this region. Malignant melanomas arise in congenital pigmented nevi or as spontaneous primary growths. They rarely arise in pigmented, hairy nevi. Trauma to a pre-existing lesion is probably a factor in stimulation of lawless growth. Cauterization or desiccation is dangerous. Metastases may occur through the skin lymphatics or the deep lymphatics or via the blood stream. Adequate surgical treatment includes wide local removal and thorough dissection of the regional nodes. We realize that the latter procedure is not always feasible. In malignant melanomas of the eye, enucleation is adequate treatment. Roentgen therapy is extremely unsatisfactory, but rarely there is benefit. It should be considered in inoperable cases. Spontaneous regression may occur in the metastases. While the prognosis is particularly poor in cases with regional lymph-node involvement, an occasional cure may be obtained. Patients should be given the benefit of adequate regional dissection.

SELECTED CASE REPORT

Case 35 (P.H. 1064). A 43-year-old man was admitted to the Pondville Hospital in January 1929. Two years before admission he had had the 5th toe removed for a "black tumor." An inguinal dissection had been done. Several months before admission he had had erysipelas of the lower leg, followed by the appearance of black nodules. Multiple nodules were found over the lower

leg, and there was a fixed mass in the groin but no nodules above the operative area. The case was considered inoperable and no treatment was given. A year later the masses in the thigh began to disappear, leaving only the pigment. The masses in the thigh finally disappeared, and the patient died of probable brain metastases 6 years after his first admission.

Spontaneous Regression of Malignant Melanoma

MALLESON N

British Medical Journal 1(1): March 12 1955; 668

Extracted Summary

A case of a patient who experienced a spontaneous remission of metastases of malignant melanoma is reported. A chest x-ray showed gross enlargement of the right para-tracheal group of lymph nodes. Biopsy of the nodes revealed "a secondary deposit from a malignant melanoma." No primary site was found. Without treatment the para-tracheal glands gradually decreased in size and were normal six years later.

SELECTED CASE REPORT

In November 1950, a white South African student aged 22 consulted me because of an enlarged supraclavicular lymph node. He had attended a colleague 18 months previously because of it and had had a chest x-ray in April 1949, which was clear. A provisional diagnosis of tuberculous adenitis had been made. On examination, the supraclavicular node was firm, smooth, egg-shaped, suggestive of lymphadenoma. A chest x-ray (November 1950) showed gross enlargement of the right para-tracheal group of lymph nodes. After consultation, he was admitted under Mr. John Gardham to the Hampstead General Hospital and the supraclavicular node was removed for biopsy. It was hard and brown on section. The pathological department of the hospital reported "a secondary deposit from a malignant melanoma. Only the cells at the very periphery of the mass are living where they merge with the fibrous tissue capsule. The firm greyish piece of tissue which is connective tissue contains a small gland which shows several small groups of melanoma cells in the peripheral sinusoids. The nature of the growth suggests the choroid may be the seat of the primary." The other half

of the gland was sent independently to the pathological department at University College Hospital, where it was similarly reported upon.

A search for the primary revealed nothing more than a small pigmented area touching the left optic disk at 5 o'clock. I allowed him to finish his M. A. early in the new year and then advised him to return home. I told him he had "sarcoid" (a disease whose prognosis a student cannot easily get from "the books"), but told his level-headed South African fiancée the true diagnosis and its outcome. I arranged to keep in touch with them and with their South African doctor.

To our surprise and quite without treatment the serial radiograms showed the paratracheal glands gradually diminishing in size, so that by early 1952 the radiograph was normal to all intents and purposes. He has remained well the whole time, has married, and has now a year-old son. I last heard from them, and a family portrait was sent me, in September last year. It is now nearly six years since he was first seen with the enlarged supraclavicular gland.

Host-Tumor Antagonism XV

The Apparently Beneficial Effects of Acute Concurrent Infections or of Toxin Therapy on the Course of Malignant Melanoma

PELNER L

American Geriatrics Society. Journal 8: May 1960; 378-397

Extracted Summary

Among the cases of spontaneous regression of malignant disease accepted as valid by Everson and Cole and other investigators, there were several in which fever or infection, or both, were implicated. Although the prognosis in malignant melanoma is notoriously bad, a number of cases have been reported in the literature in which the result was better than might be expected. Perhaps if the medical profession adopted a less pessimistic attitude about these highly malignant tumors, better results might be attained by the judicious use of all the modalities at our disposal.

One form of treatment that has not been given sufficient emphasis in recent years is bacterial toxin therapy, possibly because the data on the subject have been buried in the older medical literature or remain unpublished. We have reviewed all the histories of patients with malignant melanoma in whom concurrent infections developed or who were treated by toxin therapy (Coley toxins), and have found some spectacular results, not only immediate but of long standing.

The most important factors influencing success or failure with toxin therapy include the stage of the disease when toxins are begun, the potency of the preparation used, the duration and intensity of toxin therapy, and the amount of radiation given before or during treatment with toxins.

The findings in a series of patients who either had infections or were treated with toxins suggest that at the present time toxin therapy may be of real value in producing a larger percentage of permanent beneficial results in malignant melanoma if administered before and after surgical removal of the tumor in operable as well as in inoperable cases.

Spontaneous Regression of Malignant Melanoma

BAKER HW

American Surgeon 30(12): Dec 1964; 825-829

Extracted Summary

Spontaneous regression of a massive recurrence of malignant melanoma in the neck is reported. The patient has survived over six years since regression without evidence of disease.

Spontaneous regression is a rare example of host resistance to cancer. Twelve adequately documented instances of spontaneous regression of malignant melanoma have been previously reported. Factors which may contribute to or initiate regression are discussed.

SELECTED CASE REPORT

A 46-year-old white man was admitted to the Portland Veterans Administration Hospital on March 12, 1956, complaining of a lump on the right ear. He had first noted a "dark" spot on the ear one year previously; nine months before admission the spot had been "burned off" by a physician in another state. A month later a nodule had appeared at the original site and had slowly enlarged during the past eight months.

Examination disclosed a firm, subcutaneous, 8 millimeter nontender, bluish nodule on the antitragus of the right ear. There was a firm, 1 centimeter node palpable in the upper cervical region just beneath the lobe of the ear. There were no other significantly enlarged cervical nodes. No suspicious naevi were discovered on the body. The result of a chest x-ray was normal.

An incisional biopsy of the tumor of the ear was performed and the diagnosis was epidermoid carcinoma. On March 21, 1956, a subtotal resection of the ear was performed in continuity with a parotidectomy and a radical neck dissection. The final pathology report was malignant melanoma of the ear with metastasis to one lymph node overlying the lower pole of the parotid gland. This diagnosis was confirmed by review of the sections at the Armed Forces Institute of Pathology. The patient had an uneventful postoperative course; a plastic prosthesis was constructed for his ear, and he was discharged from the hospital on March 30.

The patient was seen in the tumor clinic without evidence of recurrence until December 1956, when a 5 millimeter deeply situated subcutaneous nodule was noted just posterior to the angle of the mandible. A poorly defined 1 centimeter subcutaneous mass was also palpable at the posterior limits of the neck dissection. Hospitaliza-

tion was recommended but was refused by the patient. By March 1957, the nodule behind the angle of the mandible had doubled in size and the posterior nodule was also larger. Hospitalization was again refused. The patient was next seen in June 1957, at which time a large, grossly infected tumor mass was present, fungating through the skin of the upper cervical region and extending up over the mastoid and on to the right cheek. The tumor was fixed to deeper structures, bled easily and much of it was black. The patient was in considerable pain but refused hospitalization and was given a prescription for pain medication.

The patient did not return for subsequent follow-up examinations and it was suspected that he had died. He reappeared 13 months later, however, on July 15, 1958, in apparent good health. Examination disclosed marked scarring in the right upper cervical region at the site formerly occupied by the fungating tumor. There was a most unusual loss of pigmentation of the skin in the scarred areas. There were no palpably enlarged cervical nodes. A complete physical examination revealed no evidence of tumor and the result of a chest x-ray was normal.

The patient was carefully questioned about his course during the past 13 months. He had received no medical advice or treatment but had applied vaseline and compresses to the area of his tumor. He stated that there had been frequent hemorrhages from the tumor, that it had gradually decreased in size and the area finally healed. He attributed his cure to prayer.

The patient has been followed intermittently to the present without evidence of recurrence. On his last examination, October 21, 1963, over seven years since operation and over six years since massive recurrence, he was free of tumor and a chest x-ray was normal.

Spontaneous Regression of Malignant Melanoma

DOYLE JC; BENNETT RC; NEWING RK

Medical Journal of Australia 2(11): Sept 15 1973; 551-552

Extracted Summary

Spontaneous regression of malignant tumours is a rare but well-recognized event. It has been previously reported in malignant melanomas but it must nonetheless still be regarded as an uncommon occurrence. Recent increased interest in the incidence and behavior of malignant melanomas within Australia, and in immunological concepts relating to this condition, have prompted us to report a further case of spontaneous regression. In particular, this related to satellite recurrences following an earlier primary resection.

We cannot offer any reason for the remarkable remission which has occurred in this patient, but its occurrence and the time (5 1/2 years) over which the tumour has remained quiescent, seem of sufficient interest to warrant reporting the case.

SELECTED CASE REPORT

This male patient, aged 65 years, presented in June 1966, with a six-week history of a dark patch about one inch in diameter appearing on the left cheek just in front of the left ear. Over the preceding two or three weeks it had become surrounded by smaller black nodules. He was otherwise well and gave no past history of disease. Examination revealed a somewhat irregular, flat, dark lesion about 1 to 2 centimeters in diameter overlying the left parotid region and confined to the skin. Above and anterior to the main lesion, but separate from it, were several small nodules 2 or 3 millimeters in diameter. No lymph nodes were palpable and no evidence of distant metastases was present, either clinically or on radiological examination. A provisional diagnosis of malignant melanoma was made and confirmed by excision biopsy of the main lesion which was submitted to urgent paraffin section.

The pathology report read as follows: "The microscopic appearance shows areas of superficial ulceration with irregular melanoma cells varying in the appearance of their nuclei. There are moderate numbers of mitotic figures. Invasion of tumour cells extends to the reticular layer of the dermis."

Two days later, wide local excision was undertaken with removal of the scar, adjacent nodules and about 4 centimeters of the surrounding skin. The specimen extended posteriorly to include the tragus of the ear, and in depth included the subcutaneous tissue and the superficial portion of the parotid salivary gland. However, the excision did not include removal of the deep cervical lymph nodes. The resulting large deficiency was repaired by means of a forehead flap based on the left occipital artery, the frontal defect being closed by a split skin graft. Histological examination of the specimen again confirmed the presence of malignant melanoma in the remaining nodules, but did not show evidence of spread to the subjacent parotid salivary gland or to any of the adjacent lymph nodes.

The patient made a satisfactory recovery after operation, but it was decided not to replace the forehead flap until it seemed clear that local cure had been achieved. He remained well for seven months before presenting with a

crop of local recurrences on the skin of the cheek adjacent to the line of excision and also involving the upper and lower parts of the flap. They appeared quickly and were apparently progressing. Considerable thought was given to the problem of further treatment. However, no satisfactory solution was reached and it was decided to do nothing immediately, but to keep the recurrences under frequent review. Further management would depend upon the rate of progress and the nature of the problems which resulted.

Unfortunately, although the patient appeared to understand the need for further review, he decided that, in the absence of symptoms, he would not report again. He was therefore not seen until the end of August 1970, three and a half years later, when he attended the outpatient clinic because of left renal colic. His pain had resolved by the time he sought attention and investigation did not reveal the presence of any urinary calculus. His visit, however, did provide the opportunity to review his melanoma. He gave a very clear history indicating that the recurrences became worse for about three months after his earlier visits. The nodules became raised above the surface of the skin but did not ulcerate. Thereafter they gradually regressed, becoming flat and much less pigmented. This improvement continued for about nine months and then remained stationary over the subsequent two and a half years before the episode of renal colic.

Examination at that time did not reveal any raised lesion, but only mild pigmentation in the vicinity of the previously recorded recurrences. Again, there was no involved lymph nodes or distant metastases. It was noted as a matter of interest, however, that he had quite marked gustatory sweating involving the flap which had been used to reconstruct the pre-auricular defect. Examination of the blood for specific antibodies to the melanoma cells gave negative results.

Since this time he has been reviewed at regular intervals and at present (January 1973), six and a half years after the original operation and five and a half years after the commencement of regression, there is no evidence of activity in the lesion.

Long-Term Spontaneous Regression of Malignant Melanoma with Visceral Metastases

Report of a Case with Immunologic Profile

BULKLEY GB; COHEN MH; BANKS PM; CHAR DH; KETCHAM AS
Cancer 36(2): Aug 1975; 485-494

Extracted Summary

A case of a 58-year-old woman with viscerally metastatic malignant melanoma is presented 12 years after spontaneous and complete regression of disease. Diagnosis of primary and metastatic lesions was confirmed by review of tissue sections. The presence and subsequent absence of visceral metastases were documented by open liver biopsies. Sections of metastatic lesions revealed extensive necrosis of tumor and infiltration by lymphocytes and plasma cells. Skin testing showed a strongly positive delayed hypersensitivity response to dinitrochlorobenzene (DNCB), to a standard battery of bacterial and fungal antigens and to two of four preparations of allogeneic melanoma antigens. Values for cell and serum mediated cytotoxicity against melanoma cells and the response of the patient's lymphocytes to phytohemagglutinin were slightly above the normal range.

A review of the literature reveals 13 other cases of long-term spontaneous regression of melanoma. None of these, however, had biopsy evidence of visceral disease. In each of the 13 cases, regression was associated with an event that might be inferred to have altered the patient's hormonal or immune status. This patient also provides evidence of a complete spontaneous, and long-term remission of metastatic disease associated with the spontaneous development of host immunity.

SELECTED CASE REPORT

A Caucasian woman, I. L., presented to the Surgery Branch, National Cancer Institute in 1962, at age 58, for treatment of recurrent malignant melanoma of the right leg. A maternal great-uncle had had an unpigmented skin cancer of the forehead, and a maternal grandfather had died of carcinoma of the stomach.

In 1953, just after the delivery of her second child, the patient had noted a 1 x 1 centimeter black mole on the lateral aspect of her right calf associated with mild pruritis in the area. No medical action had been taken. In 1956 the mole had been re-examined by her family physician who had noted no change.

In May of 1958, during the 5th month of her third pregnancy, the patient underwent excisional biopsy because of increasing size and serous drainage from the mole. Histologic examination of this tissue revealed malignant melanoma. Three weeks later she underwent wide local excision of the primary site with primary closure. Histologic examination of the excised tissue showed no residual tumor. Her postoperative course was uneventful and she delivered a normal child 2 months later. Over the next several months she underwent a breast biopsy for benign fibrocystic disease and a total thyroidectomy for a Hürthle cell adenoma. The latter procedure rendered her permanently hypothyroid and hypoparathyroid, requiring maintenance thyroid, calcium lactate, and vitamin D supplements thereafter.

In October 1960, 2 years after removal of the primary lesion, she first noted a lump in the mid-portion of the

ipsilateral thigh. This was excised and found to be a subcutaneous nodule of metastatic melanoma on frozen section examination. She therefore underwent a right radical groin dissection, which yielded four positive lymph nodes. Postoperatively she received a 6-month course of thio-TEPA (total dose 205 milligrams). During this period she developed a severe infection in her groin wound that required 3 1/2 months of local care, followed by split thickness skin graft.

Over 1 year after completion of chemotherapy, she noted the relatively sudden appearance of a dark nodule associated with multiple small areas of dark stippling of the skin, and woody lymphedema of the subcutaneous tissue of the right medial thigh, leading to her referral to the Surgery Branch in July of 1962. A diagram of her lesions was made at that time. Biopsy of one of the three most prominent thigh nodules revealed a subcutaneous metastasis of malignant melanoma. Although the liver edge was 1 centimeter below the right costal margin on deep inspiration, the remainder of the physical examination was normal. Complete blood count, serum chemistries, liver function tests, chest roentgenograms, metastatic bone survey, liver scan, intravenous urogram, barium enema, cystoscopy, lymphangiogram, and bone marrow aspiration failed to reveal evidence of further disease. Prior to an anticipated hemipelvectomy for her advanced but apparently still regional disease, an exploratory laparotomy was performed to rule out intra-abdominal metastases. Although peritoneal surfaces and abdominal lymph nodes

appeared to be free of disease, a 0.5 centimeter black nodule was found on the anterior superior surface of the right lobe of the liver and excised. Frozen section and subsequent permanent section examination of this nodule confirmed it to be metastatic malignant melanoma.

Plans for hemipelvectomy were, therefore, abandoned. Three weeks postoperatively, her remaining thigh nodule, the skin stippling, and the thigh lymphedema spontaneously disappeared, leaving her free of visible disease. Since surgery, the patient has received no treatment whatsoever and has remained free of any evidence of recurrent disease for 12 years.

The patient was readmitted for routine evaluation 5 years postoperatively in 1967, at which time a thorough diagnostic study failed to reveal evidence of recurrent disease. She was similarly reevaluated in 1968 with the same finding. In 1969, a conization biopsy showed carcin-

oma in situ of the cervix uteri following a Class V pap smear. She was readmitted and underwent an uneventful total abdominal hysterectomy and bilateral salpingo-oophorectomy. At the time of surgery a careful search of the abdomen failed to reveal evidence of malignant melanoma. Two small black scars were noted on the anterior surface of the right lobe of the liver in the area of the previous biopsy. Both were excised and microscopically revealed chronic inflammation, scarring and hemosiderin deposition without evidence of residual melanoma.

Mrs. L. was seen again in the fall of 1973, when an extensive diagnostic evaluation again failed to reveal evidence of recurrence or metastases. As of the spring of 1974 she is 70 years old, functioning actively as a housewife, apparently free of the disseminated disease which had regressed spontaneously 12 years before.

A Clinical, Histologic and Immunologic Study of a Case of Metastatic Malignant Melanoma Undergoing Spontaneous Remission

BODURTHA AJ; BERKELHAMMER J; KIM YH; LAUCIUS JF; MASTRANGELO MJ
Cancer 37(2): Feb 1976; 735-742

Extracted Summary

A patient with biopsy-proven dermal recurrent malignant melanoma who refused therapy, and who was observed to undergo clinical regression during the period of November 1972 through June 1974, was studied to define the histologic features of spontaneous remission, and to evaluate the immune response as measured by in-vitro assays of lymphocyte cytotoxicity and serum effects during the course of regression. Biopsy of regressed areas showed an absence of malignant melanoma cells in basal layers of epidermis with relative increase in basal layer clear cells; dermal inflammatory reaction with lymphocytic infiltrate, melanophages, and degenerate malignant melanocytes; and dermal reactive vascular proliferation and interstitial edema progressing to reparative dermal fibrosis. Using a microcytotoxicity assay with two established allogeneic melanoma cell cultures as target cells, a statistically significant ($p < 0.01$) increase in lymphocyte cytotoxicity values was observed over the clinical time course of regression. No significant serum cytotoxic or serum blocking effects were detectable. These findings are consistent with an immunologic basis for the spontaneous remission of the dermal melanoma metastases present in this patient.

SELECTED CASE REPORT

The patient is a 74-year-old-white man, A. F., who presented at a community hospital in 1965 with a mole on the left anterolateral chest wall in proximity to the nipple which subsequently was treated by local excision. Histologic review of the resected specimen showed a superficial melanoma with level III invasion. In November 1972, the patient was referred to the American Oncologic Hospital for evaluation and management of local chest wall recurrence. The patient was asymptomatic on presentation, with a past medical history of a bleeding peptic ulcer managed conservatively in 1965, and benign

prostatic hypertrophy treated surgically by a transurethral resection procedure in 1972. On examination, satellitosis of the left anterior chest was present without palpable adenopathy. Other systems examined were within normal limits. Radiologic and laboratory investigation revealed no evidence of systemic metastatic spread. The chest wall lesion was biopsied for histologic confirmation of recurrence. The histologic interpretation was dermal metastatic melanoma with mononuclear infiltrate.

The patient refused any form of therapy and was seen again 8 months later in July 1973, when the lesions were

flatter and less numerous: many had disappeared leaving a residual area of depigmentation. The patient gave no history of drug medication, viral type infection, febrile illness, or trauma to the area. The clinical impression was that the lesions were undergoing spontaneous regression and the patient was persuaded to undergo a punch biopsy

of the regressing area. Histology showed intradermal melanosis with no tumor cells. When next seen, approximately 1 year later in June 1974, there was further clinically observed regression. Physical examination for other sites of recurrence, adenopathy, or systemic spread was negative.

Spontaneous Regression of the Primary Melanoblastoma

HULA M

Plzensky Lekarsky Sbornik 31-34: 1976; 7-21

Extracted Summary

The author describes the spontaneous regression of the primary melanoblastoma (MBL) of the skin in 18 of the total of 220 patients, i.e., in 8.1%. None of these patients had been treated before in the area of the primary tumour; neither had absolved any total antitumourous treatment.

Clinically, in the tumour in regression there start to appear one or more facets, which are either pale or pink. Sometimes they may be bluish. These facets may gradually replace the tumour so that in the final stages there is only an inconspicuous area at the level of the skin. It can be supposed that in this area the skin may develop quite a normal appearance.

In the histological picture there is a series of changes, none of which are necessarily typical for spontaneous regression. Some of these changes were found in all cases (obligatory), some only in several cases (facultative).

The cause of the spontaneous regression of the primary melanoblastoma of the skin is not known. The histological feature of metastases does not depend on the structure of the primary tumour, which corresponds with our current experience with MBL without spontaneous regression. The course and prognosis of melanoblastoma with spontaneous regression of the primary tumour are the same as in that without regression.

Spontaneous Regression of Malignant Melanoma

*A Review of the Literature on Incidence, Clinical Features,
And Possible Mechanisms*

NATHANSON L

National Cancer Institute Monographs 44: Nov 1976; 67-76

Extracted Summary

A review of the clinical features of spontaneous regression of malignant melanoma was undertaken. Thirty-three patients with total regression of primary melanoma ("primary regressors") and 40 (13 of whom were somewhat doubtful) with regression of metastatic disease were reviewed in detail. These patients appeared to represent a typical age incidence of melanoma but the primary regressors showed an unexpected predominance of male over female patients.

A variety of unique clinical features of the histories of the patients were noted, but none appeared to explain the regression with any degree of predictability. Cutaneous metastases constituted the most common site of regression, followed, in order, by lymphatic, pulmonary, and hepatic metastases. About 40% of patients with spontaneous regressions appeared to have "spontaneous cure," which implies that the disease had not relapsed either during a long period of follow-up or until death from some other cause.

Mechanisms that possibly relate to spontaneous regression of melanoma fall into the following general categories: immunologic, endocrine, pigment metabolic, intracellular, nutritional, and carcinogenic. Further quantitative studies of patients actually undergoing spontaneous regression or the development of a model of spontaneous regression may be a key to our understanding of this interesting "experiment of nature."

Regression of Cancer Following Surgery

SINDELAR WF; KETCHAM AS

National Cancer Institute Monographs 44: Nov 1976; 81-84

Extracted Summary

Postsurgical tumor regressions are rare but well-recognized entities. The causes of such phenomena are unknown but probably are multiple. The possible relationship between postoperative infection and regression is discussed and a case history is reported.

Of 108 patients with spontaneous tumor regressions following surgery, 14 had significant infectious surgical complications, including frank sepsis and abscess formation, wound drainage and fistula formation, and persistent fever.

SELECTED CASE REPORT

A 38-year-old Caucasian housewife first sought medical attention in 1953, when a 1 x 1 centimeter black mole was noted on the lateral aspect of the right calf, appearing just after her second pregnancy. The lesion remained unchanged until 1958, when the mole enlarged and started bleeding during the 5th month of her third pregnancy. Biopsy showed malignant melanoma. Wide local excision and skin graft were performed, and pathologic evaluation showed no residual tumor in the site of biopsy.

The patient did well until late 1960, when an enlarging mass developed in the lateral mid-thigh region of the right leg. Biopsy showed metastatic melanoma, and a right radical groin dissection was performed. Three inguinal lymph nodes were positive for metastatic melanoma. The patient developed a postoperative wound infection, which required drainage and several weeks of granulation to achieve healing.

The patient remained free of disease until early 1964, when several cutaneous nodules developed in the medial right thigh and progressed in size over a 3 month period. Biopsy of the subcutaneous nodules showed metastatic melanoma. The patient underwent an exploratory staging laparotomy with the finding of pea-sized pigmented liver nodules showing melanoma on biopsy. Multiple intra-abdominal and retroperitoneal lymph node biopsies were

negative for tumor.

Because of the visceral metastatic disease, no further surgical therapy was offered. The patient was recommended for treatment with phenylalanine mustard and triethylenethiophosphoramide (thio-TEPA). While chemotherapy was being arranged, the patient noted regression of the tumor nodules in the right thigh. Within 3 weeks, all signs of cutaneous melanoma was completely disappeared. Consequently, no treatment was given, and the patient was followed closely, with no evidence of disease for the next 4 years.

The patient underwent cervical conization in 1968 for carcinoma in situ. An abdominal hysterectomy was performed, and a thorough abdominal exploration failed to show any evidence of melanoma. A liver biopsy was normal.

The patient has since been followed at yearly intervals and has remained free of evidence of recurrent melanoma 16 years after excision of the primary lesion and 12 years after spontaneous tumor regression. (Editor's Note: This patient appears to be the same patient described by Bulkley et al. in this chapter. However, Bulkley's report indicates that this patient received the chemotherapeutic agent, thio-TEPA, and this report indicates that she did not. There is also a difference in the reported age of the patient.)

Spontaneous Regression of Metastatic Malignant Melanoma

MCCARTHY WH; SHAW HM; MILTON GW

Clinical Oncology 4(3): Sep 1978; 203-207

Extracted Summary

Two cases are presented of spontaneous regression of lymphatic and visceral metastases from malignant melanoma. In contrast to most previous reports of spontaneous regression of metastases from this disease, in this study the presence of metastases in both patients was confirmed by direct observation and histological examination. In each case, the possibility was investigated that an immune-stimulating event may have occurred.

SELECTED CASE REPORTS

Mr. J.A.: A 41-year-old boilermaker had a small non-pigmented mole burnt off the back of his right knee in April 1967 by his local medical officer. He first presented at the Melanoma Clinic at Sydney Hospital in October 1967 with a lump in his right groin, present for about 6 months, and a biopsy showed it to contain malignant melanoma. Wide local excision of the primary site and in-continuity block dissection of the groin was performed at the Melanoma Clinic. Several nodes were found to contain secondary deposits of melanoma. The postoperative phase was complicated by some wound necrosis, loss of the graft with local infection and venous thrombosis in the leg followed by multiple pulmonary emboli and pleural effusion at the base of the left lung. All complications subsided with appropriate therapy.

The patient was well for 5 months until March 1968, when he started to experience recurrent, severe colicky abdominal pain. This became increasingly severe and was associated with nausea and vomiting. This continued for 4 months during which period he lost 2 stone in weight. He presented to the Clinic in August 1968 and laparotomy was performed. An intussusception of the ileum caused by a partially necrotic polypoid mass was found and 30 centimeters of dilated small bowel was resected with end-to-end anastomosis. The report on this segment of small bowel was as follows:

Gross examination: The intussusception was situated at the centre of the resected intestine and contained a lobulated mass, 8.5 x 5.2 x 5.0 centimeters coated with fibrino-purulent material. The cut surface of the mass was variably dark and light brown.

Microscopical examination: Metastatic malignant melanoma (with intussusception). The growth involved the mucosa and submucosa and was infiltrating the muscularis propria of the small intestine.

There were numerous other nodules scattered throughout the small intestine ranging in size from a pinhead to about 2 centimeters. These lesions were not touched. Postoperatively, the patient developed a mild pyrexia and a large wound abscess was drained. The wound healed satisfactorily after 3 weeks and there were no other postoperative complications.

The patient has been examined regularly since this operation and was last seen in July 1978, nearly 10 years after laparotomy. No evidence of further recurrence or metastases has been detected. He had been intermittently troubled by cellulitis in his right leg during this period and small patches of vitiligo had appeared on his arms and graft on the leg.

Mrs. E. E.: A 62-year-old housewife had a small malignant melanoma removed from her left lower leg in January 1970, at Western Suburbs Hospital. The defect was repaired by a skin graft. There

was no evidence of recurrence until she noticed a lump in the left groin in August 1975, for which a radical dissection of the left inguinal nodes was carried out, and several nodes contained secondary melanoma. Postoperatively, the patient developed a fever and wound infection. Local recurrence of melanoma occurred within a few weeks in the groin when a further attempt was made to remove the mass. Upon surgical exploration, the lesion was found to extend down to the femoral artery and total excision was considered impossible. The report on the excised tissue was as follows:

Gross examination. A mass of adipose tissue, connective tissue, and muscle containing several nodules of firm, greyish white tumour, the largest, 1.5 centimeters in extent.

Microscopical examination. Sheets of undifferentiated epithelioid cells with abundant eosinophilic cytoplasm, round to oval and reniform nuclei of varying sizes and numerous mitoses. The tumour infiltrated the subcutis and the underlying musculature. Lymphatic and vascular invasion was also evident. Although melanin was not unequivocally demonstrated, the appearances are considered to be consistent with metastatic malignant melanoma.

Over the next 3 months, a large mass measuring 20 x 8 centimeters developed in and around the groin scar. She was referred to the Melanoma Clinic for chemotherapy and immunotherapy in January 1976. However, it was found that her veins were virtually impossible to cannulate and so attempts at systemic chemotherapy were abandoned. She was given one dose of intradermal Bacillus Calmette-Guerin (BCG) to which there was negligible reaction, but because of the rapidly increasing size of the recurrence, she was classified as being in the terminal stages and was admitted to a terminal-care hospital.

Three months later, she was discharged from this hospital feeling much better and the mass in her thigh had become considerably smaller and was clearly undergoing remission. It was decided to do nothing but observe this unusual event. By October, 1976, the mass had disappeared entirely. This remission was accompanied by an abnormality which caused instability in her gait, weakness and difficulty with her walk. Complete neurological investigation revealed no spinal or cerebral metastases and no explanation of this abnormality was found. The symptoms reverted spontaneously to normal within 3 months. This patient was last examined in August 1978, 20 months after the large mass had disappeared entirely from her groin. At this time, there was no local or generalized recurrence of the melanoma. However, the symptoms and signs of the other abnormality were recurring and further investigations revealed that she was suffering from polymyositis. No evidence of metastatic melanoma was detected.

Spontaneous Regression of Metastatic Malignant Melanoma

MIKHAIL GR; GORSULOWSKY DC

Journal of Dermatologic Surgery and Oncology 12: May 5 1986; 497-500

Extracted Summary

Spontaneous regression of metastatic malignant melanoma is rare. A case is presented here. The primary lesion, a lentigo malignant melanoma of the face, recurred after excision and metastasized to the parotid and upper cervical lymph nodes, and to the lungs. The patient declined further therapy. There was no clinical or radiologic evidence of metastasis 1 year later.

SELECTED CASE REPORT

A 77-year-old woman was first seen in June 1978 with a 25-year history of a slowly enlarging, black lesion of the face. The lesion extended from the palpebral conjunctiva of the right lower eyelid superiorly to the mandibular margin inferiorly, and from the right nasolabial fold medially to the preauricular area laterally. Two 1 centimeter, lightly pigmented nodules were present in the infraorbital area and cheek. There were no lymphadenopathies or significant findings, and the chest x-rays did not show any abnormalities. The nodules, removed as biopsies, showed a spindle cell malignant melanoma, Clark level IV, 2.8 millimeters maximum thickness. Mohs microscopically controlled surgery, fresh tissue technique was undertaken in June 1978 to ablate the lesion, with the exception of the part involving the eyelid margin and palpebral conjunctiva which was deferred to a later date in order to avoid exposure and injury to the globe. A split-thickness autograft was used to cover the wound.

In April 1979, 10 months after the initial excision, three new pigmented plaques had developed adjacent to

the superior, anterior, and inferior margins of the graft. They were 0.5, 0.7, and 1.0 centimeters in size. Biopsies showed malignant melanoma, Clark level II, 0.2 millimeters thick. It was noted that there was a 1 centimeter, subcutaneous mass in the parotid gland and several smaller masses, presumably lymph nodes, could be palpated in the submandibular region. The parotid mass was excised and proved to be a lymph node with metastatic melanoma. Radiographs of the chest showed nodules in both lungs which were considered compatible with a metastatic tumor. The patient consented to have the cutaneous and conjunctival lesions excised, but declined further studies or therapy. She was then kept under periodic observation.

When seen in March 1980, about 12 months after the last excision, the lymph nodes had become nonpalpable, and the lesions in the lungs had cleared. The patient remained free of any signs or symptoms of melanoma until she expired from other causes in May 1985, about 6 years after the initial evaluation.

Spontaneous Regression of Intestinal Malignant Melanoma from an Occult Primary Site

SROUJIEH AS

Cancer 62(6): Sep 15 1988; 1247-1250

Extracted Summary

Spontaneous regression is a well-recognized phenomenon that affects malignant neoplasms. Malignant melanoma is known to undergo such a change. It may affect the primary lesion and be confirmed histologically or the primary lesion may pass unnoticed and metastasis occurs from an occult primary. Spontaneous regression less frequently affects metastatic melanoma. Metastasis from malignant melanoma to the gastrointestinal tract occurs frequently. It may occur without a known primary and is considered a primary intestinal tumor by some authors.

A 55-year-old male patient who had melena and intussusception that proved to be due to malignant melanoma of the small intestine is described. History and close examination failed to show any evidence of a primary lesion. The diagnosis was made after a biopsy was performed on two lesions in the neck. This was followed by a palliative and incomplete resection of an involved ileal segment. The patient did not receive chemotherapy, radiotherapy, or immunotherapy. He is now alive 8 years after diagnosis without evidence of malignancy. This case represents spontan-

eous regression of malignant melanoma of the small intestine that is considered either a primary intestinal tumor or a metastatic tumor from an occult regressed primary. The latter assumption makes this case unique in that spontaneous regression occurred twice, once in the occult primary lesion and once in the intestinal metastases.

SELECTED CASE REPORT

In June 1979, a 55-year-old male patient had attacks of dizziness, generalized weakness, and melena. He gave no history of dyspepsia, abdominal pain, or bleeding tendencies. General, abdominal, and rectal examinations were all normal. Investigations showed an erythrocyte sedimentation rate (ESR) of 37 mm/hour (Westergren method), mutant hemoglobin level of 10.3 gm/dl and microcytic hypochromic red cells. The leukocyte count and differential, platelets, prothrombin and partial thromboplastin time, alkaline phosphatase, serum bilirubin, serum glutamic oxaloacetic transaminase (SGOT), and serum glutamic pyruvic transaminase (SGPT) were all normal. Serum iron level was 16 micrograms/dl (normal 59-158 micrograms/dl), and total iron binding capacity was 310 micrograms (normal, 200-300 micrograms). A barium meal and follow through, and a barium enema were reported normal. Gastroduodenoscopy and colonoscopy also were normal. Bone marrow aspirate was monocellular with depleted iron stores and no malignant cells.

In October 1979, a subcutaneous mass developed in the right side of the neck and a deep mass developed in the right suboccipital region of this patient. A total excision of the former and partial excision of the latter were proved histologically to be malignant melanoma. Requestioning the patient failed to show any history of surgical excision of a cutaneous lesion. Physical examination including the retina, and the skin, with excision of a few relatively large moles, failed to show any evidence of a primary lesion. Therefore, laparotomy was advised for a possible metastatic intestinal melanoma.

On the day before his scheduled surgery, acute intus-

susception developed in this patient. Laparotomy was performed on November 6, 1979. Multiple black intramural ileal lesions, and mesenteric and paraaortic lymph node metastases were found. Palliative resection of approximately 35 centimeters of the ileum was done with end to end anastomosis. Other smaller ileal lesions were left behind, and mesentery and paraaortic lymph node deposits could not be resected. Histologic examination confirmed the presence of malignant melanoma.

The patient's recovery was uneventful, with no evidence of infection. He was discharged 10 days postoperatively. His condition was discussed with his family, and it was decided that no form of therapy would be administered. His symptoms disappeared and he remained in good health. Repeated clinical examinations and chest radiographs were normal, but a barium meal and follow through done in April 1981 was reported as having multiple filling defects in the small intestines. The patient was asymptomatic at the time and was kept under observation. A laparotomy performed in October 1982, during repair of an incisional hernia, did not show any evidence of disease in his abdomen.

The patient remained in spontaneous regression. In May 1987, clinical examination, serum immunoglobulins, chest radiograph, bone scan, and computed tomography (CT) scans of the abdomen and brain were all normal. A biopsy specimen of a nodule from the suboccipital scar showed fibrosis without evidence of malignancy. The patient is now in good health 8 years after diagnosis.

SUPPLEMENTAL REFERENCES MALIGNANT MELANOMA

Über Einen Fall von Totalresorption eines Grossen Melanosarkoms

PLENIO CJO

Archiv für Klinische Chirurgie 34: 1887; 698-700

A Lecture on Melanoma (Delivered at the London Hospital, February 7th 1902)

EVE F

Practitioner 70: 1903; 165-174

Melanosarcoma of Shoulder and Nodes about Shoulder: Well After Incomplete Operation

MATHEWS FS

Annals of Surgery 62: 1915; 114-117

Malignant Melanoma with Delayed Metastatic Growth

WILBUR DL; HARTMANN HR

Annals of Internal Medicine 5: 1931; 201-211

Als Beiträge zum Kapitel "Erysipel und Karzinom"

MÜLLEDER A

Zentralblatt für Chirurgie 59(28): 1932; 1684-1685

Cutaneous Melanoma: Two Cases Alive Thirty and Thirty-eight Years After Operation

PRINGLE JH

Lancet 1: Feb 27 1937; 508-509

- Striking Regression of Generalized Subcutaneous and Visceral Metastases of Malignant Melanoma (Melanoblastoma) Following Intensive High Voltage Roentgen Irradiation of the Pituitary Gland
WIGBY PE; METZ MH
American Journal of Roentgenology 41(3): 1939; 415-419
- Malignant Melanoma: Report of a Case Recurring After Fourteen Years
HERSPERGER WG; NEILL W JR
American Journal of Surgery 52(1): Apr 1941; 111-114
- Note on the Experimental Use of Rabies Vaccine for Melanomatosis
PACK GT
Archives of Dermatology and Syphilology 62: 1950; 694-5
- Virus Therapy in the Treatment of Tumors
HIGGINS GK; PACK GT
Bulletin for the Hospital for Joint Diseases 12: 1951; 379-86
- Malignant Melanoma in a Patient with Ovarian Agenesis: Case Report of Prolonged Survival
LEVI JE; LEWISON EF
Journal of Clinical Endocrinology and Metabolism 12: July 1952; 901-907
- Long Survival in Malignant Melanoma: Report of a Case
GALGANO AR
Journal of the American Medical Association 152(6): June 6 1953; 518-519
- Spontaneous Regression of Melanoma (Report of a Case)
SUMNER WC
Cancer 6(5): Sep 1953; 1040
- Malignant Melanoma, Spontaneous Regression After Pregnancy
ALLEN EP
British Medical Journal 2: Oct 29 1955; 1067
- Mélanome à Évolution Exceptionnellement Lente, Depuis Plus de 16 Ans
GRUPPER C; DELONS P
Societe Francaise de Dermatologie et de Syphiligraphie. Bulletin 63: Nov 8 1956; 446-448
- A Clinical Evaluation of Malignant Melanoma
VOGLER WR; PERDUE GD; WILKINS SA JR
Surgery, Gynecology and Obstetrics 106: 1958; 586-594
- Malignant Melanoma Treated with Vaccinia Injections
BURDICK KH
Archives of Dermatology 82: 1960; 188-189
- Experimental Local Therapy of Cutaneous Metastases of Malignant Melanoblastoma with Cow Pox Vaccines or Colcemid (Demecolcine or Omaine)
BELISARIO JC; MILTON GW
Australasian Journal of Dermatology 6: 1961; 113-118
- Metastatic Melanoma with Indeterminate Primary Site (Report of Two Instances of Long-Term Survival)
PACK GT; MILLER TR
Journal of the American Medical Association 176(1): Apr 8 1961; 55-56
- Malignant Melanoma with Brain Metastasis: Case Report with Seven-Year Survival
TURNER FP; CRAWFORD AS
Journal of the Maine Medical Association 52: 1961; 204
- Malignant Melanomas of the Skin: A Study of the Origin, Development, Aetiology, Spread, Treatment, and Prognosis, Part I
PETERSEN NC; BODENHAM DC; LLOYD OC
British Journal of Plastic Surgery (Scotland) 15: 1962; 49-97
- Transplacental Metastases of Malignant Melanoma: Report of a Case
CAVELL B
Acta Paediatrica Scandinavica 146(suppl): 1963; 37-40
- Vitiligo in a Case of Vaccinia Virus-Treated Melanoma
BURDICK KH; HAWK WA
Cancer 17(6): Jun 1964; 708-712
- Spontaneous Regression of Primary Malignant Melanomas with Regional Metastases
SMITH JL JR; STEHLIN JS JR
Cancer 18(11): Nov 1965; 1399-1415
- Effects of Reducing the Phenylalanine-Tyrosine Intake of Patients with Advanced Malignant Melanoma
DEMOPOULOS HB
Cancer 19(5): May 1966; 657-664
- The Limited Role of Attenuated Small Pox Virus in the Management of Advanced Malignant Melanoma
MILTON GW; LANE-BROWN MM
Australian and New Zealand Journal of Surgery 35: 1966; 286-290
- Spontaneous Regression of Primary Malignant Melanoma with Regional Metastasis: Report of a Case with Photographic Documentation
TODD DW; FARROW GM; WINKELMANN RK; PAYNE WS
Mayo Clinic. Proceedings 41(10): Oct 1966; 672-676

- Malignant Melanoma: Regression of Metastases After Excision of Primary Growth
STIDOLPH KE
Royal Society of Medicine. Proceedings 60: Jan 1967; 1
- Malignant Melanoma with Occult Primary Lesions
MILTON GW; LANE-BROWN MM; GLIDER M
British Journal of Surgery 54(7): Jul 1967; 651-658
- Spontaneous Regression of Malignant Melanoma with Regional Glandular Metastasis (Regressao Expontanea de Melanoma Maligno com Metastase Ganglionar Regional)
MAC CLURE E; DE LACERDA PR; FERNANDES FILHO C
Hospital(Rio de Janiero) 71(5): May 1967; 1295-1299
- A Study of 650 Observed Malignant Melanomas in the Southwest Region
BODENHAM DC
Royal College of Surgeons of England. Annals 43: 1968; 218-239
- Long-term Survival After Removal of Metastatic Malignant Melanoma of the Brain. Report of Two Cases
MCCANN WP; WEIR BKA; ELVIDGE AR
Journal of Neurosurgery 28(5): May 1968; 483-487
- Regression of Malignant Melanoma as a Manifestation of a Cellular Immunity Response
LLOYD OC
Royal Society of Medicine. Proceedings 62: 1969; 543-545
- Enhancement of Natural Resistance to Malignant Melanoma with Special Reference to the Beneficial Effects of Concurrent Infections or Bacterial Toxin Therapy. End Results in 50 Cases
FOWLER GA
Cancer Research Institute Monograph #9, NY : 1969
- Spontaneous Local Regression of a Metastatic and Fatal Melanoma (Régression Locale Spontanée d'un Mélanome Métastatique et Mortel)
PARACHE RM; CHARDOT C
La Presse Medicale 77(54): Dec 20 1969; 2059-2060
- Uses of Vaccinia Vaccine in the Treatment of Metastatic Malignant Melanoma
HUNTER-CRAIG I; NEWTON KA; WESTBURY G; LACEY BW
British Medical Journal 2(708): May 30 1970; 512-516
- Unusual Clinical Course in Patients with Malignant Melanoma
FOLEY WJ; COON WW
Michigan Medicine 69: Sep 1970; 763-766
- Partial Regression of Primary Cutaneous Malignant Melanoma
LITTLE JH
Pathology 3: 1971; 62
- Malignant Melanoma
MOORE GE; GERNER RE
Surgery, Gynecology and Obstetrics 132: 1971; 427-436
- Intracranial Metastatic Malignant Melanoma: Long-Term Survival Following Subtotal Resection
BAUMAN ML; PRICE TR
Southern Medical Journal 65(3): Mar 1972; 344-346
- Spontaneous Regression of Malignant Tumors (Spontan Regression af Maligne Tumores)
BRINCKER H; ANDERSEN AP
Ugeskrift for Laeger 134(12): Mar 20 1972; 597-601
- Melanoma: Growth Patterns, Multiplicity and Regression
MCGOVERN VJ
Melanoma and Skin Cancer, McCarthy W. H., editor [Sydney: Blight 1972, 95-106]
- Regression of Intradermal Malignant Melanoma After Intralesional Injection of Mycobacterium Bovis Strain BCG
NATHANSON L
Cancer Chemotherapy Reports 56(5): Oct 1972; 659-665
- Morphologic Patterns of Spontaneously Regressing Melanoma in Relation to Host Immune Reactions
IKONOPISOV RK
Pigment Cell: Mechanisms in Pigmentation, McGovern V. J. & Russel P., editors [Basel: Karger 1973, Vol 1, 402-409]
- Spontaneous Regression of Malignant Melanoma: Pathologic and Immunologic Study of a Ten Year Survivor
MAURER LH; MCINTYRE OR ; RUECKERT F
American Journal of Surgery 127(4): Apr 1974; 397-403
- Multiple Melanoma: Beneficial Effects of Acute Infections or Immunotherapy (Bacterial Vaccines)
NAUTS HC
Cancer Research Institute Monograph 12: 1975
- Spontaneous Regression of Melanoma
MCGOVERN VJ
Pathology 7(2): 1975; 91-99
- Spontaneous Regression and Leukoderma in Malignant Melanoma (Spontanregression und Leukoderm beim Malignen Melanom)
HAPPLE R; SCHOTOLA I; MACHER E
Der Hautarzt 26(3): 1975; 120-123

Spontaneous Regression of Primary Cutaneous Melanoma

Medical Journal of Australia 2(20): 1975; 761

Spontaneous Partial Regression of Malignant Melanoma and its First Metastasis: Case Report

FAXÉN A; KOCK NG; BOERYD B

Scandinavian Journal of Plastic and Reconstructive Surgery 10(3): 1976; 245-246

Spontaneous Regression of Malignant Melanoma

GOLBERT ZV; ROMANOVA OA; CHERVONNAYA LV

Arkhiv Patologii 39(6): 1977; 36-42

Spontaneous Regression of Malignant Melanoma

MANELIS G; SHASHA SM; MANELIS J; SUPRUN H;

ROBINSON E

Oncology 35(2): 1978; 83-86

Spontaneous Regression of Metastatic Malignant Melanoma in 2 Sibs with Xeroderma Pigmentosum

LYNCH HT; FRICHOT BC III; FISHER J; SMITH JL JR;

LYNCH JF

Journal of Medical Genetics 15(5): Oct 1978; 357-362

Spontaneous Regression of Malignant Melanoma

BODURTHA AJ

Human Malignant Melanoma, Clark W. H., Goldman L.

I. & Mastrangelo M. J., editors [New York: Grune & Stratton 1979, 227-241]

Natural History, Clinical Features, Diagnosis and Prognosis of Spontaneous Regression of Cutaneous Malignant Melanoma (Historie Naturale, Clinica,

Diagnosi Prognosi Della Regressione Spontanea Del Melanoma Maligno Cutaneo [Regression Melanoma])

CRISTOFOLINO M; PISCIOLI F; TOMASI G; ET AL.

Chronica Dermatologica 10(6): 1979; 683-688

Effect of Postoperative Wound Infection on the Course of Stage II Melanoma

PAPACHRISTOU DN; FORTNER JG

Cancer 43(3): Mar 1979; 1106-1111

Spontaneous Regression of Metastatic Malignant Melanoma

RAMPEN FHJ

Clinical Oncology 5(1): Mar 1979; 91-92

Melanoma (Hutchinson's Lentigo Maligna) having Spontaneous Regression: A Case of Immunologic

Importance (Melanoma [Lentigo Maligno de Hutchinson] de Regresion Espontanea. Caso de Interes Inmunologico)

GRINSPAN D; PAZ A; ABULAFIA J; MOSTO S

Medicina Cutanea Ibero-Latino-Americana 8: 1980; 33-45

Spontaneous Regression of a Facial Malignant Melanoma

WHICKER JH; DEMARCO PR; FITZGIBBONS JF

Archives of Otolaryngology 106(1): Jan 1980; 50-51

Spontaneous Regression of Malignant Melanoma?

(letter) (Spontanregression des Malignen Melanoms?)

BRAUN-FALCO O

Deutsche Medizinische Wochenschrift 105(20): 1980; 714

Malignant Melanomas with Unknown Primary

Tumor. Report on 12 Patients and Review (Maligne

Melanome Mit Unbekanntum Primärtumor: Bericht über 12 Patienten und Übersicht)

LANDTHALER M; BRAUN-FALCO O

Der Hautarzt 32(7): 1981; 339-344

Spontaneous Regression of Human Malignant Melanoma

HORI Y; MASUZAWA M; TAKEZAKI S; ARAI H

Japanese Journal of Dermatology (Nihon Hifuka Gakkai Zasshi) 8(1): Feb 1981; 69-74

Regression in Malignant Melanoma

TRAU H; KOPF AW; RIGEL DS; LEVINE J; ROGERS G;

LEVENSTEIN M; BART RS; MINTZIS MM; FRIEDMAN RJ

Journal of the American Academy of Dermatology 8(3): Mar 1983; 363-368

Metastatic Malignant Melanoma of Unknown

Primary Origin: a Study of 30 Cases

PANAGOPOULOS E; MURRAY D

Journal of Surgical Oncology 23(1): May 1983; 8-10

Long-Term Survival in Stage I and Stage II Malignant Melanoma of the Limbs: A Regional Review

WEAVER RM; GRIMLEY RP

Clinical Oncology 9(2): Jun 1983; 131-134

Bilateral Black Hypopyon in a Patient With Self-Healing Cutaneous Malignant Melanoma

WORMALD RPL; HARPER JI

British Journal of Ophthalmology 67(4): 1983; 231-235

Ultrastructural Studies of Human Malignant Melanoma In Spontaneous Regression

KANZAKI T; NISHIYAMA S

Yale Journal of Biology and Medicine 57(3): 1984; 378

Spontaneous Regression of Primary Malignant Melanoma with Metastases

KESSLER E; SCHWARTZ P; ANTEBI E

Plastic and Reconstructive Surgery 74(3): 1984; 427-429

Spontaneous Partial Regression of Primary Melanoma With Death Due to Metastases

SAIDA T; TSUCHIYA S

Archives of Dermatology 120: Nov 1984; 1494-1496

Partial Regression in Thin Primary Cutaneous Malignant Melanomas Clinical Stage I: A Study of 486 Cases

SONDERGAARD K; HOU-JENSEN K

Virchows Archiv Section A: Pathological Anatomy and Histology 408(2-3): 1985; 241-247

Metastatic Melanoma of the Brain after Spontaneous Regression of the Primary (Technical Note)

RAMPEN FHJ; MEIJER J

Acta Neurologica Scandinavica 72(2): Aug 1985; 222-224

Regression in Thin Malignant Melanoma: Microscopic Diagnosis and Prognostic Importance

COOPER PH; WANEBO HJ; HAGAR RW

Archives of Dermatology 121(9): Sep 1985; 1127-1131

Complete Spontaneous Regression of Metastatic Malignant Melanoma: A Case Report

POE DS

Otolaryngology-Head and Neck Surgery: Sept 1985; 113

Thin Malignant Melanomas with Regression and Metastases

RONAN SG; ENG AM; BRIELE HA; SHIOURA NN; DAS

GUPTA TK

Archives of Dermatology 123(10): Oct 1987; 1326-1330

Spontaneous Remission of Malignant Melanomas (Spontanremission Maligner Melanome)

BIER J; MACHER E

Fortschritte der Kiefer- und Gesichtschirurgie 33: 1988; 171-172

Melanophagic Dermatitis and Panniculitis: A Condition Revealing an Occult Metastatic Malignant Melanoma

PIÉRARD GE

American Journal of Dermatopathology 10(2): Apr 1988; 133-136

Spontaneous Regression of Multiple Bone Metastases in Malignant Melanoma

O'CONNELL MEA; POWELL BWEM; O'CONNELL JM;

HARMER CL

British Journal of Radiology 62(744): Dec 1989; 1095-1100

Spontaneous Regression of Cancer

PAPAC RJ

Connecticut Medicine 54(4): Apr 1990; 179-182

Lymph Node Metastasis from Melanoma with an Unknown Primary Site

JONK A; KROON BBR; RÜMKE P; MOOI WJ; HART AAM;

VAN DONGEN JA

British Journal of Surgery 77(6): Jun 1990; 665-668

Squamous Cell Sarcomas and Other Epithelial Carcinomas

An Observation of the Effects of Erysipelas on Epithelial Cancer

COLLINS J

Times and Register 27: 1894; 268

Extracted Summary

A case is reported in which recurring epithelial cancer disappeared after an attack of erysipelas. The case is reported without special comments, since Dr. Coley has written on this subject in considerable detail. The author is aware that a single case from the practice of a surgeon is but of little value, isolated and alone, but it is hoped that it will stimulate others to add their experience and observations.

SELECTED CASE REPORT

About eighteen months ago my attention was called by Mr. M. to an ulcer nearly opposite the ear, on the right cheek. This ulcer was one and a half inches in longest diameter, one inch in the shorter, presenting an oval with irregular edges. The discharge was slightly purulent, tinged with blood. The granulations were soft and bled on the slightest touch.

Mr M. stated that twenty years ago there appeared at this point a small elevation, which frequently formed a scab, which every ten or twelve days would fall off and then reform, giving but little trouble and received but little treatment.

Nineteen years ago he was treated for a time with ointments and lotions, also some medicine was administered without special benefit. He was then assured that this was skin cancer and incurable. This ulcer gradually increased in size and depth. Some benefit was derived

from a lotion of zinc sulphate and salt, dissolved in water to make a mild astringent solution. The ulceration, however, continued giving inconsiderable pain, but much annoyance by its presence. The good man quietly accepted the situation, seeking only palliation and relief from pain.

About November 12 he suffered from an attack of erysipelas of the face. This ran no unusual course, spreading rapidly from tip of nose over scalp to nape of neck. The efflorescence was followed by desquamation. The external dressing was of ichthyol and lanolin, which seemed to give relief and comfort.

As the erysipelas faded out, the desquamations following the ulcer seemed to assume a more healthy appearance. Granulations of a more normal character developed and in about two weeks the ulcer was entirely healed. The cicatrix on March 1 is slightly indurated, but smooth and firm, presenting the appearance of normal cicatricial tissue.

A Case of Multiple Primary Squamous-Celled Carcinomata of Skin in a Young Man

SMITH JF

British Journal of Dermatology 46(6): 1934; 267-272

Extracted Summary

Multiple squamous carcinoma of the skin is not common, and in most recorded cases it has arisen in the course of some precancerous affliction; such as xeroderma pigmentosa, or the atrophic skin following radiodermatitis, or long exposure to tars or shale-oils. Nothing of the kind is present in this case, and the photographs show how normal and "young" the skin is, apart from the actual lesions and scars. Moreover, the epitheliomata do not arise on keratoses, as they commonly do in senile cases, tar-workers, persons long exposed to weather, or in subjects of chronic arsenical poisoning. They are recognizable as carcinomata from the moment of their first being noticed so that they correspond to the primary epitheliomata which have been so well described by Savatard. I have seen many of these, but only once have I seen more than one in the same subject, and in that case there were only two. The thirty active lesions and numerous scars of the present patient put him in a class by himself, and the spontaneous healing adds another feature which is, I venture to think, hitherto unknown. I have thought, and colleagues with whom I have discussed the case have agreed with me, that in view of the benign course of the affliction it would be very unwise to experiment with treatment which would be as likely to upset the balance and promote metastasis as to cure.

SELECTED CASE REPORT

William A, aged 23 years, miner, came under my observation in March 1933. In the summer of 1927, when he was aged 16 years, spots began to appear on his legs. These were, from his description, at first reddish macules, then became papular, enlarged, ulcerated, and ultimately healed, leaving pitted scars. The individual lesions lasted for months, and fresh ones appeared in numbers rather more than sufficient to balance the healing, so that the count of active lesions slowly increased. His face and ears soon became affected, and one or two lesions appeared on his arms and thighs.

Those on his face and ears have always been smaller than those on his legs, and have run a shorter course. He has been able to work, except for a few months in 1931, when lesions on his knees prevented him from kneeling. He had never previously suffered from any disease of the skin.

He is a well-built and healthy-looking young man. On his cheeks, forehead, nose, especially the columella and adjacent parts of the vestibule and upper lip, insides and backs of ears are numerous peculiar lesions, which are seen in all stages of development. They commence as minute reddish papules, which resemble early acne

lesions, of which a few are also present, but the apparent blackhead is in reality a horny plug, which cannot be expressed, though in one or two, but not in most, a little cheesy material can be squeezed out at this stage. As they enlarge, their centres become ulcerated with irregular, rolled edges. Later the ulcer heals and the edges flatten out, leaving deep, pitted scars, with irregular, overhanging, crenellated borders. On the legs are numerous lesions of similar type, but much larger size: 13 separate ones on the right leg, and two composite groups on the left. There are many irregular depressed scars, some showing recurrent nodes, and here and there in the scars are seen epidermal bridges, reminiscent of scrofuloderma. The most prominent lesion is one on the antero-external aspect of the right leg. It is circular about 4 centimeters in diameter, is raised about 1 centimeter above the normal skin level, has a fungating centre, and exudes a thin, ichorous fluid. There are one largely healed lesion on the right thigh, one sound scar on the right elbow, and one largely healed lesion in the left forearm. The trunk is completely free. The skin apart from the actual lesions and scars is moist, supple, has a good hair-growth, and is in every respect that of a healthy young man.

Cultures from several lesions yielded on *B. proteus* and enterococcus. Wassermann reaction negative. General medical examination revealed nothing abnormal.

Most of the lesions have run a slow course in the direction of healing. One on the face, observed from start to finish, lasted for six months, and left a typical scar. Many have lasted much longer than this. The prominent lesion on the right leg extended to form a patch 9 x 7 centimeters, the centre flattening out and healing, and the raised margin gradually subsiding. It now (March 2nd, 1934) shows little sign of activity. A few new lesions have appeared on his neck, and are growing very slowly, if at all; one recent one on the back of the hand and one on the calf have been excised, and have not recurred.

Five biopsies have been done so far. These are best discussed in order of the stage of the lesion, rather than in the order in which they were made.

A papule about the size of a millet-grain from the inner aspect of the left calf, was excised six days after it was first noted as a pinhead-sized lesion. This shows great downgrowth of the epidermis, with a central horny plug, exhibiting a whorled structure. Many epithelial pearls are seen, and strands of epidermal cells penetrating the tissue spaces of the corium. Diagnosis: Early squamous carcinoma.

A red, fleshy papule was excised from the back of the hand, about the size of a lentil, with a central horny plug, of three weeks' duration. This is similar to No. 1, but larger. The strands of epidermal cells which are permeating the tissue spaces show unequivocally malignant characters, irregularity of size and staining, numerous mitotic figures, absence of basement-membrane, round and plasma cell reaction. Diagnosis: Early squamous carcinoma of a very active type.

A portion of the raised margin of the large lesion was excised two months after it was photographed, by which time the lesion had approximately doubled in size, and was commencing to heal in the centre. It also shows squamous carcinoma, but with a more obvious attempt on the part of the epidermal cells to complete their developmental cycle.

A recurrent node in a scar on the right leg was excised. It shows many epithelial pearls, and is still a definite carcinoma, but differentiation of the cells is more marked than in No. 3.

A portion from the periphery of the same lesion as No. 2, was taken four months later, when healing was practically complete. Sections show scar-tissue, with loss of the normal pattern of the corium. The elastic fibrils have largely been destroyed, and clumps of coarse elastic tissue can be seen under the epidermis, at the junction of the scar and the normal skin. Here and there degenerate remains of epithelial pearls can be made out. Profs. Sir Robert Muir and J. Shaw Dunn have kindly examined sections, and agree with the foregoing interpretation.

Self-Healing Primary Squamous Carcinoma of the Skin

DUNN JS; SMITH JF

British Journal of Dermatology 46: 1934; 519-523

Extracted Summary

A case report is presented of a man with primary squamous carcinoma of the skin. After excision of the primary lesion the man healed with no recurrence reported. It is not impossible that some of the cases of primary epithelioma which are diagnosed clinically, excised, proved histologically and cured permanently, are examples of the condition described here, and if they had been left to develop naturally, they would have gone through the series of changes, ending in spontaneous cure.

SELECTED CASE REPORT

A sheet-iron worker, J. McC., aged 42 years, came on June 6th, 1934, with a single large plaque lying over Scarpa's triangle on the right thigh. He gave its duration at first as three weeks, but on close questioning said that it might have been at most five weeks. It was oval, 3 1/2 by 3 centimeters, and raised about 3 millimeters above the normal skin-level; dull red in colour, with a smooth, shining surface, and in the centre a depressed area, 1 centimeter in diameter, dotted with irregular, blackish, hyperkeratotic points. The margin of this central area was undermined, but there was nowhere any ulceration.

The plaque was firm, elastic, freely movable, and neither painful nor tender. The inguinal glands on both sides were just palpable. His skin elsewhere presented no abnormality of note. His W.R. was at first positive, and on this account a course of anti-syphilitic treatment was given, but a second test before the first injection and a third on the occasion of the second injection were both negative. The lesion was excised whole by Mr. J.A.G. Burton on June 21st, with healing by first intention and no recurrence to date (October 12th), while no alteration has taken place in the regional glands.

Multiple Primary, Self-Healing Squamous Epithelioma of Skin

SMITH JF

British Journal of Dermatology 60: Oct 1948; 315-318

Extracted Summary

A third case is added to the two already described of what the author has called "multiple primary, self-healing squamous epithelioma of the skin," and the later history of the first case is given. There seems now to be justification for claiming that this is a distinct and hitherto unrecognized dermatosis.

SELECTED CASE REPORT

Subsequent history of Case 1: (*Brit J Dermatol*, 46: 1934, 267) The large lesions on his right leg were treated with radium, and this unfortunately was followed by necrosis of the tibia, and ultimately, at the patient's own request, Mr. G. T. Mowat amputated below the knee. The advent of the contact x-ray apparatus made

it easy to treat the individual lesions; but he has been an irregular attender, and has permitted much further destruction of the soft tissues of his face. He is now wearing a prosthesis to cover the extensive destruction of his nose.

Familial Primary Self-Healing Squamous Epithelioma of the Skin (Ferguson Smith Type)

SOMMERVILLE J; MILNE JA

British Journal of Dermatology 62: Dec 1950; 485-490

Extracted Summary

A case of primary self-healing squamous carcinoma of the skin is described. The familial incidence is recorded and emphasized. The impossibility of early histological diagnosis is stressed.

SELECTED CASE REPORT

Our record concerns Mrs. A. A., aged 34, a healthy service woman of more than average intelligence who was first seen on 22 June 1943 complaining of a tumour of the right ala nasi, adjacent to the nasolabial fold. This lesion was clinically a frank squamous epithelioma of the button type. She gave a history of recurring similar growths, dating from the age of eighteen, when she was treated for a solitary one on the front of the left lower leg. She then remained free from further lesions for eleven years, until about 1938. Since then she has had

about twelve in all, mainly around the chin, mouth and nostrils, but also on the ears, scalp, forearms, left index finger and left buttock. They are described as commencing as small pimples which enlarge to a size varying from a small pea to a marble. The largest of these lesions had occurred on the left forearm, buttock and lower leg and had been actively treated with trichloroacetic acid, surgical excision and coagulation diathermy. The smaller ones which had been left untreated had all undergone spontaneous regression within a period of four months.

In view of this history and the scars of the previous lesions a tentative diagnosis of self-healing carcinoma of the skin was made. Tissue from the ala nasi was excised: Pathological examination showed a well-differentiated squamous carcinoma but revealed absolutely no evidence of the healing process described by the above-named authors. In view of this the patient was kept under observation to await the development of further lesions. Of the multiple scars noted at examination some were the result of active interference, while others were apparently the result of spontaneous regression.

The patient was next seen on 3 July 1947, when she exhibited a small pigeon-pea-sized nodule on the edge of the right nostril near the site of an old scar. This had developed during sunny weather when on holiday, and for cosmetic reasons was treated by coagulation diathermy. In early June 1949 she presented a further lesion, which had appeared three weeks previously. This was a

firm nodule, 1 centimeter in diameter and 0.5 centimeter raised, with a central depression and showing some slight surrounding inflammatory reaction, an appearance typical of a "button epithelioma." In view of the previous pathological findings no biopsy was taken at this time as it was desired to watch the evolution of the lesion, and as the patient, by now assured of the outcome, preferred the lesion to be left untouched.

By mid-September it shrunk considerably, revealing a central dried horn-like protuberance; during the first week of October (i.e. four months after onset) the horny tuft separated spontaneously, leaving a somewhat inflamed crater-like depression. This figure also confirms Ferguson Smith's description of "deep pitted scars with irregular overhanging crenellated edges." As previously stated, the duration of about four months was said by the patient to be a consistent feature.

Spontaneous Cure of Epidermoid Carcinoma with Widespread Metastases

SCHNAPP AC; BLAKE WJ

Wisconsin Medical Journal 60(12): Dec 1961; 633-636

Extracted Summary

A case of spontaneous regression of malignancy has been presented which we believe fulfills the criteria set forth by Stewart. The diagnosis of squamous cell carcinoma was made by several pathologists, on a histologic basis. Some of the probable factors responsible for this phenomenon have been mentioned. This patient is alive and well with no evidence of malignancy seven years after establishment of the diagnosis. No adequate reason can be suggested for his recovery.

SELECTED CASE REPORT

The patient, a 40-year-old truck driver, was first admitted to St. Luke's Hospital on October 15, 1950. His chief complaint was low back pain radiating to the left leg. He stated that he had had the same symptoms four years previously and that they had been treated by heat and traction. He admitted being a smoker and a moderate drinker. A complete physical examination was negative. The diagnosis was possible herniated intervertebral disc. Routine laboratory studies were normal except for a neutrophilic leukocytosis of 12,450. A consultant advised conservative treatment by heat and traction. After a few days when heat and traction failed to relieve the pain a body cast was applied.

The patient was discharged but returned on November 6, 1950, with a recurrence of back pain. The left leg muscles were atrophied and weak for which he received physical therapy. A laminectomy was performed. A large, degenerated disc between L-4 and L-5 was found. This was removed and the patient made an uneventful recovery.

The next admission of the patient to the hospital was on June 7, 1954, when he was 44 years old. He complained of dull pain in the left arm, forearm and shoulder on

and off, for six months. In addition to this, for the past four months he had noted a mass in his right inguinal region which had gradually enlarged. There were no fever, chills or nausea. He had taken no medicine. He was afebrile, well developed and well nourished. His blood pressure was 114/72; weight, 148 pounds; and height, 66 inches. He had a hard nodular mass in the right inguinal region, a small cervical lymph node, and enlarged left inguinal lymph node, enlarged, hard bilateral epitrochlear and axillary lymph nodes. The complete blood count was normal; a chest x-ray film was read as negative. The erythrocyte sedimentation rate was within normal range.

A large mass of firm, matted nodes was removed surgically from the right inguinal region. The specimen consisted of three rather lobulated, but roughly spherical masses of tumor tissue, 5 to 3 centimeters in diameter. In addition there were four pieces of soft, pink, elastic tissue 1 centimeter in diameter each. The larger nodules had uniform surfaces made by cutting, of a gray, granular and friable nature, that grossly resembled metastatic carcinoma. There was yellow necrosis in the large specimen. The microscopic examination showed that all nodes submitted

were almost entirely replaced by masses and cords of neoplastic cells resembling squamous cells.

The tumor cells varied greatly in size and shape and in places formed small deposits (pearls) of keratin. The pathologic diagnosis was epidermoid (squamous cell) carcinoma, metastatic, of inguinal lymph nodes.

Upon receiving this report, the attending physician consulted with the pathologist, remarking that the patient's general good health, and the lack of an obvious primary source for such extensive metastatic lesions, tended to throw doubt on the diagnosis. At this time, therefore, a thorough analysis of possible causes of a mix-up of specimens was carried out. It was determined that neither on that day nor any other day during the week, had other lymph nodes been received by the pathologist for diagnosis. Neither had lymph node biopsy been performed either in the outpatient department or in the operating room. Also, from comparing notes on the gross character of the nodes in question, the attending physician and the pathologist could not but agree that the specimen was indeed from the patient, because both observers felt the granular and firm nature of the tissue was outstandingly obvious to both men.

The patient was discharged without treatment of any kind, as it was decided to keep him under observation. Because of the widespread glandular enlargement and the positive diagnosis of malignancy by several pathologists, it was decided to forego the search for the primary lesion. The patient's wife was appraised of the diagnosis and

prognosis. She did not inform the patient who to this day is unaware of his condition.

He did not come to the attending physician's attention for some six months, at which time he appeared to be in excellent health. The examiner was impressed with the almost complete disappearance of the glands. When questioned as to whether he had undergone treatment elsewhere, the patient stated that he had had no treatment, medical or radiological, since his discharge from the hospital. He was again admitted to the hospital on September 12, 1956. At this time he had no complaints but entered merely for re-biopsy of the original site in order to determine what had happened to the metastatic carcinoma previously found in that area. Physical examination was negative except for bilateral axillary nodes. The complete blood count and urinalysis were negative, except for leukocytosis of 11,500 with 7 eosinophils. The hemoglobin was 16.4 gm/100 ml. His weight was 140 pounds, his height 64 inches. Several small nodes were removed from the right inguinal region and these were examined by the pathologist, who reported only reactive hyperplasia.

Today, some seven years after the original onset of symptoms of enlarged lymph nodes, the patient is well. He is employed as a truck driver which requires not only driving but also loading and unloading. He is able to perform a full day of hard work, feels strong and has lost no time from his work since 1956. He has had only an occasional upper respiratory infection since 1956 from which he quickly recovered. His weight has remained between 140 and 143 pounds for the past four years.

SUPPLEMENTAL REFERENCES SQUAMOUS CELL SARCOMAS AND OTHER EPITHELIAL CARCINOMAS

Über die Spontane Rückbildung des Hautepithelioms
BOLOGNESI J

Archiv für Klinische Chirurgie 94: 1911; 705

Guérison Spontanée ou Médicale de Quelques Cas de
Cancer Cutanés

TOURAINÉ A; DUPERRAT R

Société Française de Dermatologie et de Syphiligraphie.
Bulletin 42: 1935; 1727

Érysipéle et Cancer: A Propos de Deux Observations
Inédites

LAVEDAN J

Paris Medical 11: Mar 1940; 109-111

Self-Healing Epithelioma of the Skin

CHARTERIS AA

American Journal of Roentgenology 65(3): 1951; 459-464

Multiple Primary Spontaneous-Healing Squamous-
Cell Carcinomata of the Skin

CURRIE AR; SMITH JF

*Journal of Pathology (Journal of Pathology and
Bacteriology)* 64: 1952; 827-839

Multiple Primary Self-Healing Prickle Cell Epithelioma
of the Skin

WITTEN VH; ZAK FG

Cancer 5(3): May 1952; 539-550

Multiple Primary Self-Healing Squamous Epithelioma
of the Skin (Ferguson Smith) and its Relationship to
Molluscum Sebaceum

MARSHALL J; FINDLAY GH

South African Medical Journal 27: Nov 7 1953; 1000-05

Multiple Self-Healing Epithelioma. Electron Microscopy and Viral Studies in Two Cases: Nonspecificity of a Nuclear Particle in Keratoacanthoma

BURKET JM; CAPLAN RM

Archives of Dermatology 90(1): Jul 1964; 7-11

Spontaneous Regression in Basal Cell Carcinomas

CURSON C; WEEDON D

Journal of Cutaneous Pathology 6(5): Oct 1979; 432-437

Self-Healing Squamous Epithelioma: A Family Affair

JACKSON IT; ALEXANDER JO'D; VERHEYDEN CN

British Journal of Plastic Surgery (Scotland) 36(1): 1983; 22-28

Merkel Cell Tumor with Spontaneous Regression

O'ROURKE MGE; BELL JR

Journal of Dermatologic Surgery and Oncology 12(9): Sept 1986; 994-996, 1000

Regression of Locally Recurrent Squamous Cell Carcinoma of the Skin Following Excision of a Metastasis with Review of the Literature

ROSEMAN JM

Journal of Surgical Oncology 39(3): Nov 1988; 213-214

Bowen's Disease

Spontaneous Regression of Bowenoid Atypia of the Vulva

SKINNER MS; STERNBERG WH; ICHINOSE H; COLLINS J

Obstetrics and Gynecology 42(1): July 1973; 40-46

Extracted Summary

A case is reported of a patient with intraepithelial (Bowenoid) carcinoma of the vulva in which spontaneous regression of the lesions occurred.

A 15-year-old girl gave birth to a normal term infant with an episiotomy on August 13, 1970. She was seen on September 7 and 14 because of rupture of the episiotomy incision. There was no evidence of vulvar or perineal lesions at that time.

Two months later (November 24, 1970) she returned with perineal pruritus. Examination revealed numerous 1 x 1 centimeter pigmented lesions on the posterior region of the vulva and in the perianal area. Biopsy showed Bowenoid changes in the squamous epithelium. Two months later (January 19, 1971), the appearance of the lesions was unchanged.

On March 24, 1971, the patient was admitted to the hospital for tests. Chest x-ray, cytology, VDRL, pregnancy tests and proctoscopic examinations were all negative. Biopsy was performed and reconfirmed the Bowenoid atypia. No virus could be recovered from the lesions.

On May 18, 1971, upon re-examination, there was a change in the appearance of the perineal lesions. Biopsy showed hyperkeratosis and nonspecific chronic vulvitis, no Bowenoid atypia. Repeat biopsies have continued to show chronic vulvitis. The patient had no evidence of infection with Herpes virus hominis type 2. (Permission to reproduce case report denied by author.)

Multicentric Bowen's Disease of the Genitalia

Spontaneous Regression of Lesions

BERGER BW; HORI Y

Archives of Dermatology 114(11): Nov 1978; 1698-1699

Extracted Summary

The phenomenon of multiple lesions of Bowen's disease appearing on the genitalia of young adults is becoming increasingly recognized. We have seen two patients who had genital lesions with histologic features of squamous carcinoma in situ, but with an entirely different clinical appearance. In both patients, varying degrees of spontaneous regression occurred. A conservative approach to management of these lesions is suggested.

SELECTED CASE REPORT

Case 2: In May 1976, a 25-year-old woman was seen in the Dermatology Clinic for evaluation of vulvar lesions that had been present for four months. These lesions appeared two months after the delivery of a normal term infant. She was gravida 2, para 2, and did not have similar lesions with her first pregnancy. There was no history of arsenic ingestion or preceding viral lesions of the vulva. Findings on physical examination were within normal limits except for the vulvar lesions. Several brown to brown-black verrucous nodules were present on the labia majora bilaterally. They measured 3 to 10 millimeters and appeared in a linear distribution. The following laboratory examinations yielded results that were either negative or within normal limits: complete blood cell count, urinalysis, blood chemistry studies using an automated multiple analysis system, and serological tests for syphilis. The serum viral titer for herpes simplex was

less than 4. Light microscopic examination of a representative lesion showed epidermal hyperplasia, parakeratosis, disorganization of epidermal cells, numerous mitotic figures, individual cell keratinization, and lymphocytic infiltrates in the upper dermis. The epidermal-dermal junction was well preserved. Histologic diagnosis was Bowen's disease. Electron microscopy demonstrated deformity of the nucleoli, indented nuclei, and nuclear bodies. No viral particles were observed. No treatment was administered, and the lesions regressed within a three-week period following her initial visit to our clinic. Brown macules were all that remained of the original lesions. Histologic examination of one of these macules showed no mitotic figures nor atypism of epidermal cells. The patient has remained free of Bowen's disease for the past two years.

SUPPLEMENTAL REFERENCES BOWEN'S DISEASE

Reversible Vulvar Atypia: A Case Report
FRIEDRICH EG JR
Obstetrics and Gynecology 39(2): Feb 1972; 173-181

Spontaneous Regression of Bowenoid Papulosis of the Penis
EISEN RF; BHAWAN J; CAHN TH
Cutis 32(3): Sept 1983; 269-272

Hemangiomas

Vascular Nevus with Spontaneous Involution

HOPKINS JG

Archives of Dermatology and Syphilology 43: 1941; 1033-1035

Extracted Summary

J. L., a girl aged 4 years, had at birth a vascular nevus of the interscapular region which was soft, slightly raised and scarlet, apparently a typical strawberry mark. When the child was seen at the age of 18 months, the lesion measured 15 by 21 millimeters and was slightly raised. The surface had whitened somewhat but was studded with deep red points. In the belief that the type of nevus known as the strawberry mark almost invariably disappears spontaneously, no treatment was advised. Today the area is flat; a few red dots and a red line about the border are still visible. The case is presented for opinion as to the frequency of spontaneous disappearance of such lesions.

Hemangiomas: Should Treatment Be Expectant or Active?

RONCHESE F

Rhode Island Medical Journal 29: 1946; 658-661

Extracted Summary

The question of treating or not treating infantile hemangiomas, in view of the fact that the majority of them disappear spontaneously, is reviewed and discussed. Because not all hemangiomas disappear, as proved by their occurrence in adult life, and because with proper treatment the risk involved is very small and the sequelae inconsequential, it is advisable to treat the majority of them, leaving untreated only those which, for size and location, are suitable for later surgical removal, should they not disappear.

The Spontaneous Involution of Cutaneous Vascular Tumors

RONCHESE F

American Journal of Surgery 86: Oct 1953; 376-386

Extracted Summary

For the last five years several cases of vascular tumors (mainly infantile strawberry and cavernous hemangiomas) which had vanished without therapy were observed and the literature on the subject perused. It is difficult to form an exact idea of the percentage of such occurrences because of the prevailing opinion, especially among radiologists and surgeons, that it is unwise or dangerous to leave hemangiomas untreated. There is also parental unwillingness to wait for three or four years for spontaneous involution. Consequently, the great majority of such patients receive treatment in one form or another. To repeat Traub's words of nineteen years ago, "the obvious confusion existing in the minds of most physicians in regard to the proper disposition of vascular nevi" is still with us.

I do not advocate expectant therapy for all cases; however, being convinced that a large majority do involute spontaneously, I am in favor of no therapy in selected cases in which the lesions are located in covered body areas or may easily be removed surgically at a later date in the event spontaneous involution does not materialize.

Spontaneous Disappearance of Hemangioma of the Skin in Children

MIGMANOVA NS
Voprosy Onkologii 14: 1968; 8-15

Extracted Summary

The author concludes that spontaneous disappearance of the cutaneous hemangiomas in children is a natural step in the development of tumors of this kind; cutaneous hemangiomas pass three stages in their development: growth, stationary, and regression; spontaneous regression can be observed in children as young as one year, although it usually reaches its maximum by 3-4 years old and is rarely found after 7 years old; vascular formations on the hairy part of the head have the most pronounced tendency toward spontaneous involution; telangiectatic hemangiomas regress spontaneously more often than any other type; the child's sex or time of first appearance are not significant factors for the spontaneous disappearance. (Noetic Sciences translation)

Multiple Diffuse Hemangiomatosis

Case Report and Review of the Literature

FRYNS JP; EGGERMONT E; EECKELS R
Zeitschrift für Kinderheilkunde (European Journal of Pediatrics) 117(2): 1974; 115-119

Extracted Summary

A case of multiple hemangiomatosis in a newborn is described. After a fulminant outburst of cutaneous lesions during the first weeks of life, spontaneous regression began after the age of 6 months. The pertinent literature is briefly reviewed.

SELECTED CASE REPORT

The patient, S. I., was admitted to the Department of Pediatrics at the age of 13 days with multiple cutaneous hemangiomas. She was the first child of healthy parents. The mother's age was 27 years, the father's 32 years. There was no consanguinity. Family history was negative with regard to congenital malformations, the presence of hemangiomas or congenital anomalies of the blood vessels. Pregnancy was uneventful, and delivery at term. Routine physical examination at birth was completely normal. No hemangiomas were present. On the third day of life a few hemangiomas appeared on the extremities. Progressively the whole body was involved as the lesions increased not only in number but also in size. Physical examination on admission revealed an infant in excellent general condition. The length was 50.5 centimeters (50th percentile); the weight 2,860 kilograms (10th percentile) and the head circumference 33.5 centimeters (10th percentile). A large number of hemangiomas were visible all over the body. They were especially numerous on the chest and the abdomen. Seventy-six lesions were counted on the trunk, varying in size from a few millimeters to one centimeter in diameter. They were bright red and became black on pressure. Lesions were also found in

the buccal mucosa and in the irises of both eyes. Further ophthalmological examination was normal. The liver was enlarged 4 centimeters below the costal margin. No other abnormalities were observed. The routine biochemical screening was normal. The platelet count was 280,000/mm³. Urine analysis was normal. A skeletal survey revealed no hemangiomas in the bones. Scintillation scintigraphy of the liver and the brain was normal. Biopsy of a skin lesion showed a typical capillary hemangioma, lined by a regular endothelial wall without any sign of invasion of the surrounding tissues. The infant was discharged after 10 days and was seen at weekly intervals as an out-patient. During the first 6 months of life the hemangiomas increased fairly slowly in number and size. After 9 months of age there was a striking involution of some lesions. A number of hemangiomas, especially those of the irides, disappeared, whereas others discolored. Regression continued, and at the age of 18 months about 50% of the lesions were in complete regression. At the present time only 10% of the original lesions do not yet show any sign of involution. The child is doing well, and weight (11.2 kilograms) and height (83 centimeters) are in the 75th percentile for her age.

Congenital Hemangioma of the Orbit and Lid

RICHARDS RD

Southern Medical Journal 67(4): Apr 1974; 498-500

Extracted Summary

Spontaneous regression is the natural history for congenital hemangiomas (strawberry nevi). Treatment is not indicated for most patients until the natural improvement has reached the maximum, since conventional methods of treatment may result in greater deformity. The best treatment for most of these patients is zealous neglect, although this may be most difficult. A case report is presented which illustrates spontaneous regression.

SELECTED CASE REPORT

A female infant was first seen in November 1961 at age two months. She had congenital hemangiomas of the strawberry nevus type involving the face, lid, and conjunctiva, and also in the orbit, producing proptosis of the right globe. Small lesions had been present at birth, but had increased in size rapidly during the two months after delivery. Examination showed full ocular movements and no evidence of strabismus. The globe was well protected by the lid. The exophthalmos measured OD, 20 millimeters; OS, 12 millimeters; base, 70 millimeters (Hertel exophthalmometer).

Reassurance was given the parents, and the patient was followed at two-week intervals. No significant change was observed for a month, and measurements remained the same until early December 1961. The patient's mother brought her back early because of a rapid increase in the proptosis. Examination showed the proptosis was greater, but the lid protected the globe well. The measurements were OD, 20 + millimeters; OS, 10 millimeters; base, 70 millimeters (Hertel).

Repeat examinations were at two-week intervals. In January 1962, a slight increase in the size of the hemangioma was seen. Monthly visits until age six months, in

March, showed a gradual increase in size of the skin hemangioma, causing an entropion of the right lower lid.

At age eight months, the first sign of spontaneous regression was seen, with the skin becoming a whitish grey in the middle of the lesion. Regression was steady but slow, and repeat examinations were made at increasingly greater intervals.

By 24 months of age, significant regression had occurred, and measurements were OD, 15 millimeters; OS, 10 millimeters; base, 80 millimeters (Hertel). Ocular movements were full and no strabismus was present.

At age 4 1/2 years, measurements were OD, 19 millimeters; OS 15 millimeters; base, 85 millimeters (Hertel). Vision was 20/30 with each eye, and fusion was present.

Regression continued to the last examination in January 1971 at age 9 1/2. Some skin changes were still present, but the general cosmetic result was very good. Vision was 20/20 with each eye, with normal fusion. Ocular movements were full and normal. Ophthalmoscopic examination was normal. There was still slight exophthalmos, with measurements OD, 22 millimeters; OS, 18 millimeters; base, 90 millimeters (Hertel).

Spontaneous Disappearance of True Capillary Hemangiomas of the Integument in Children

FEDOREEV GA

Vestnik Khirurgii Imeni I. I. Grekova 124(3): March 1980; 111-115

Extracted Summary

This study is based on observations made at the Leningrad Oncological Clinic during the period 1958-1964. During that time 5482 children with 6667 true capillary hemangiomas visited the clinic. Since 803 children had multiple hemangiomas, the authors prefer to base their analysis on the number of hemangiomas seen rather than the number of patients.

During a 3-year period 4102 children with 4989 vascular hemangiomas were treated and observed. Among them 2697 tumors were treated by different methods and 2292 were observed with no treatment. Of the 2292 in the no treatment group, 95.9% of the true capillary hemangiomas of the skin disappeared. Subcutaneous hemangiomas regressed somewhat less often; in 81.3% of the cases.

Based on their study, the authors conclude that in cases of true capillary hemangiomas treatment can hardly be justified.

(Noetic Sciences translation)

Spontaneous Resolution of a Giant Congenital Melanocytic Nevus

HOGAN DJ; MURPHY F; BREMNER RM
Pediatric Dermatology 5(3): Aug 1988; 170-172

Extracted Summary

This is the second report of a case of spontaneous resolution of a giant congenital melanocytic nevus, which was documented both by photographs and skin biopsies. Cases of spontaneous resolution of these lesions may represent a vigorous host response against an aberrant clone of melanocytes.

SELECTED CASE REPORT

A 25-year-old woman was referred to the dermatology clinic at the University Hospital, Saskatoon, complaining of tightness, thickening, and itching of the skin of the left neck, upper shoulder, back and especially, the left ear. Examination at that time revealed poikilodermatous sclerosis of the left upper back, upper shoulder, left ear, and posterior neck and scalp. The lower scalp was alopecic due to scarring. Two skin biopsies revealed only dermal sclerosis.

The patient stated that she had been hospitalized as an infant at University Hospital, Saskatoon. These records were requested because of the unexplained nature of her

dermal sclerosis. A review of the medical records revealed that she had been hospitalized for seven months beginning at age 7 months because of cachexia, and ulceration and induration of a giant congenital melanocytic nevus. The chart contained a photograph documenting the nevus at age 7 months. The lesion had also been biopsied at that time to confirm the diagnosis. The only treatments during her hospitalization were a blood transfusion at age 7 months and numerous topical and systemic antiinfective agents from 2 1/2 to 14 months of age. The nevus became sclerotic and paler by 13 months of age. The patient was unaware that she had ever had a giant pigmented nevus.

SUPPLEMENTAL REFERENCES HEMANGIOMAS

On the Spontaneous Regression of Hemangiomas in Children

SOLOVKO AIU

Voprosy Onkologii 12: 1966; 17-20

Spontaneous Regression of Hemangiomas in Infants: II

GROTHUSEN G

Aesthetische Medizin 17: 1968; 47-58

Spontaneous Regression Processes in Hemangiomas in Infancy I (Spontane Rückbildungsvorgänge an Hamangiomen des Sauglingsalters I)

GROTHUSEN G

Aesthetische Medizin 17(2): Feb 20 1968; 27-34

Regression of Cutaneous Capillary Hemangioma

SACHATELLO CR; MCSWAIN B

American Journal of Surgery 116: Jul 1968; 113-114

Mutilating Hypertrophic Angioma: Spontaneous Progressive Regression (Angiome Hypertrophique Mutilant: Régression Progressive Spontanée)

HADIDA ME; SAYAG J

Societe Francaise de Dermatologie et de Syphiligraphie. Bulletin 76(3): Jan 25 1969; 416-417

Extensive Ulcerous Angioma of Infants with Spontaneous Healing (Angiome Extensif Ulcereux du Nourrisson avec Guérison Spontanée)

JEZEQUEL C; LECORNU M

Cahiers du College de Medecine des Hospitaux de Paris 10(7): Jun 15 1969; 565-568

A Case of Neonatal Hemangiomatosis with Spontaneous Recovery (Su di un Caso di Emangiomatosi Neonatale a Guarigione Spontanea)

PAOLI F

Revista de Clinica Pediatrica 82: Oct-Dec 1969; 364-367

Long Term Results of Low-Voltage X-ray Therapy and Spontaneous Regression of Cutaneous Hemangiomas in Children (Otdalennye Rezul'taty Nizkovol'tnoi Rentgenoterapii i Spontannoi Regresii Gemangiom Kozhi u detei)

SVISTUNOVA TM; ABSHILOVA DI

Voprosy Onkologii 17(9): 1971; 99-104

Clear Cells Hidradenocarcinoma with Spontaneous Regression Associated with Hemangiopericytoma: Report of an Unusual Case (Hidroadenocarcinoma de Celulas Claras de Involucion Espontanea Asociado a Hemangiopericitoma: Comunicacion de un Caso no Usual)

REYES G

Actas Dermo-Sifiliograficas 70(11-12): 1979; 645-656

Incidence of Occurrence and Spontaneous Regression of Skin Haemangiomas in Children (Vorkommenshaufigkeit und Spontanregression von Hamangiomenderhaut Bei Kindern)

SCHICKEDANZ H; KLEINTEICH B

Paediatric und Grenzgebiete (Pediatrics and Related Topics) 23(5): 1984; 319-323

Regression of a Congenital Giant Pigmented Nevus of the Scalp Associated with Congenital Halo-Nevi (Régression d'un naevus pigmenté géant congénital du cuir chevelu associé à des halo-naevi congénitaux)

BOURGEOIS-DROIN C; GRANIER F; GROSSIN M

Annales de Dermatologie et de Venereologie 116(11): 1989; 866-868

Multiple Halo Nevi: Their Differential Diagnosis from Malignant Melanoma (Mnozhestvennye halo-nevusy: differentsial'naiia diagnostika so zlokachestvennoi melanomoi)

GORDELADZE AS; PAVLOVA TA

Arkhiv Patologii 52(2): 1990; 66-69