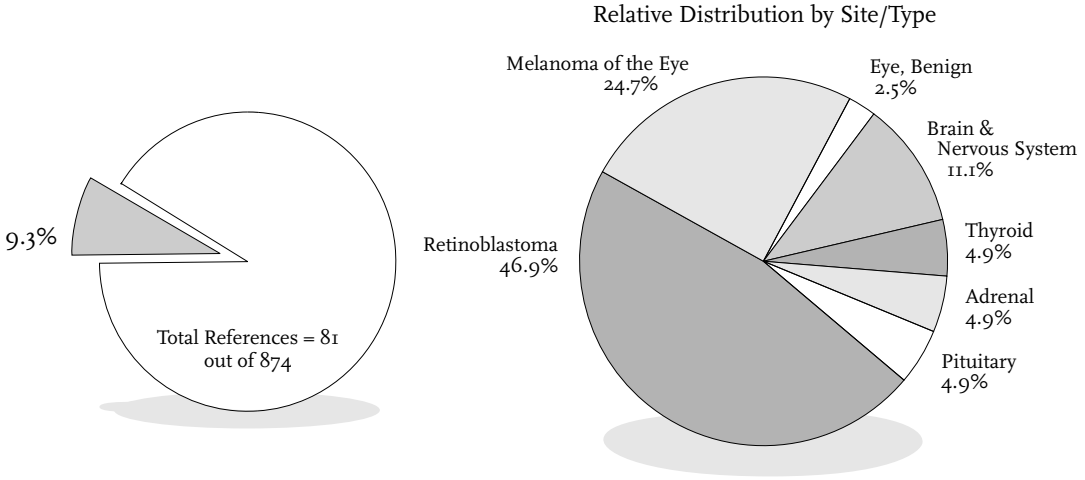
9. Remission of Neoplasms of the Eye, Brain, Nervous System, and Endocrine Glands

Remission of Neoplasms of the Eye, Brain, Nervous System, and Endocrine Glands



References in Chapter Nine = 81
References in Part One = 874

Neoplasms of the eye, brain and nervous system, and endocrine glands account for 3.1% of the cases of cancer reported by participating tumor registries to the SEER (Surveillance, Epidemiology, and End Results) Program between 1983 to 1987. Neoplasms of the eye and orbit account for 0.2%; brain and nervous system neoplasms, 1.6%; and neoplasms of endocrine glands 1.3% of the total. Thyroid cancers account for 1.2% of those occurring in the endocrine glands. The relative five-year survival rate (%) for the years 1981-1986 for neoplasms of the eye and orbit is 75.3%; for brain cancers, 22.7%; and 94.2% for thyroid cancers. Other endocrine cancers, including thymus, have a combined five-year survival rate of 47.1%. Mortality data, reported as the rate per 100,000 population, show that deaths from cancers of the eye and orbit are 0.1; for brain and nervous system, 4.1; for endocrine cancers, 0.7 per 100,000 (Cancer Statistics Review 1973-1987).

There are 81 references in Chapter 9. Thirty references are annotated with summaries. Some of the annotated references contain 1 or more case reports. There are 51 supplemental references in the chapter provided as additional research materials. There are 38 references to retinoblastoma, 13 of which are annotated, and 7 of which contain case reports. Twenty references and 3 case reports of melanoma of the eye are reported in this chapter rather than with the other references to malignant melanoma which are found in Chapter 6.

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 Nine †

Tumor Site/ Type	References (number)	Cases (number)	Cases (%)
Retinoblastoma	38	7	2.7%
Melanoma of the Eye	20	3	1.2%
Hemangiomas	2	1	0.4%
Brain	9	2	0.8%
Thyroid (malignant)	1	1	0.4%
Thyroid (benign)	3	0	0.0%
Adrenal	4	1	0.4%
Pituitary	4	0	0.0%
Totals	81	15	5.9%

† 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 Eye, Brain, and Endocrine Glands

Tumor Site/ Type	Rohdenburg (1918) (N =185)	Fauvet (1960) (N=192)	Boyd (1966) (N=97)	Everson (1966) (N=182)	Challis (1990) (N=505)
Retinoblastoma	0	2	17	0† †	33
Brain	0	1	2	0	4
Thyroid	0	4	0	2	1
Adrenal	0	0	0	0	1
Totals	0	7	19	2	39

†† Everson and Cole did not report cases of retinoblastoma in their review, Spontaneous Regression of Cancer.

Neoplasms of the Eye

Retinoblastoma

Spontaneous Regression of Retinoblastoma

Steward JK; Smith JLS; Arnold EL
British Journal of Ophthalmology 40: 1956; 449-461

Extracted Summary

Two brothers suffering from retinoblastoma are described and the inheritance of this disease in their family is traced. Evidence is bought forward to show that their father suffered in infancy from bilateral retinoblastoma which regressed spontaneously. The literature of the spontaneous regression of retinoblastoma is reviewed. The mode of regression is discussed.

The author, in analyzing the literature found that diagnosis of spontaneously regressed retinoblastoma has been based on four types of evidence: (a) a family history of the disease; (b) a clinical diagnosis of bilateral retinoblastoma with the removal of one eye only (usually with histological proof) followed by arrest of growth in the other; (c) a fundus picture corresponding to that of verified cases; and (d) calcified tumour cells in phthisical eyes.

The possibility that an acute febrile illness could cause arrest of the growth is suggested by the history of Stallard's case (British Medical Journal 2 (1936) 962-964) in which regression took place during a scarlet fever illness at the age of four years. The other eye had been removed about three years before due to retinoblastoma.

Spontaneous Regression of Retinoblastoma

Boniuk M; Zimmerman LE
International Ophthalmology Clinics 2(2): June 1962; 525-542

Extracted Summary

We have reported observations on a group of fourteen enucleated eyes that contained a retrogressed retinoblastoma. In six patients the retinoblastoma was unilateral. The other eight patients had a retrogressed retinoblastoma in one eye with viable tumor in the opposite eye. With one exception, all eyes with retrogressed tumor in the present series were phthisical. The diagnosis of retrogressed retinoblastoma was based principally on the finding of calcified tumor cells in the enucleated eyes. A family history of retinoblastoma and the presence of retinoblastoma in the opposite eye provided confirmatory evidence of the retinoblastoma in some cases.

As a result of our observations we feel that in young children all eyes with an endophthalmitis or phthisis bulbi should be suspected of containing a retinoblastoma. The delay in development of the tumor in the second eye in several of our cases indicates the importance of careful and repeated ophthalmoscopic examination.

Spontaneous Regression of Bilateral Retinoblastoma

Boniuk M; Girard LJ
American Academy of Ophthalmology and Otolaryngology. Transactions 73(2): March-April 1969; 194-198

Extracted Summary

A 62-year-old man had a bilateral spontaneously retrogressed retinoblastoma with phthisis bulbi in one eye and a characteristic picture of chorioretinal atrophy and chalk-white areas of calcification

in the other eye with 20/200 vision. It is believed that the ophthalmoscopic picture is characteristic, that phthisis bulbi in children should make one strongly suspect the possibility of retinoblastoma and that, histologically, the presence of focal areas of calcification (often adjacent to bone) with remnants of pyknotic nuclei should be considered pathognomonic of retrogressed retinoblastoma. It is important to recognize this pathologically so that the other eye of the patient and the eyes of his siblings may be examined periodically for evidence of viable tumor.

Selected Case Report

A 62-year-old white man had a febrile illness at the age of 18 months. Since that time he had had no vision in the shrunken right eye and poor vision in the left eye. In 1962 he had an uneventful cataract extraction in the left eye with postoperative vision of 20/200. Fundus examination revealed large whitish areas of chorioretinal atrophy inferiorly and two elevated chalk-white areas of calcification temporally and inferiorly. In 1967 a clinical diagnosis of retrogressed retinoblastoma was made and the right phthisical eye was enucleated for diagnostic and cosmetic purposes.

Gross: The specimen consisted of a shrunken globe measuring 10 x 14 x 12 millimeters with 5 millimeters of optic nerve attached. The globe did not transilluminate. The cornea was opaque, measuring 9 x 7 millimeters; there was a dense horizontal linear scar representing a band keratopathy. The globe was sectioned vertically. The anterior chamber was present but shallow. The retina was totally detached and drawn up into a very dense fibrous cyclitic membrane. The lens was not identified. Posterior to the cyclitic membrane, the vitreous cavity was filled with a variegated light tannish-brown mass, which contained some white firm areas and some dispersed uveal pigment.

Microscopic: The corneal epithelium was of irregular thickness. A mild inflammatory pannus was present at the limbus on both sides. Bowman's membrane was poorly defined throughout. Centrally there were strands of basophilic material that involved the superficial one half of the cornea. There was diffuse superficial as well as deep vascularization of the corneal stroma. There was a reduplication of Descemet's membrane. Peripherally Descemet's membrane continued to line the posterior aspect of a space which represented the anterior chamber. The iris and ciliary body were poorly defined and markedly atrophic. Remnants of the lens were not identified. A large amount of osseous tissue filled the posterior segment of the eye. This mass of osseous tissue was separated by fibrous connective tissue septa. In some areas the osseous tissue lay adjacent to calcified material that represented remnants of necrotic tumor cells. Posterior to this area there were similar masses of calcified necrotic tumor cells surrounded by a dense fibrous connective tissue stroma containing focal areas of proliferated pigment epithelium. There were no remnants of identifiable retina and only a few fragments of identifiable choroid and pigment epithelium. The sclera was markedly thickened and folded. The optic nerve showed marked atrophy with thickening of the pial septa and marked atrophy of the nerve fiber bundles.

The pathologic diagnosis was phthisis bulbi secondary to retrogressed retinoblastoma.

The Practical Management of Retinoblastoma

Ellsworth RM

Transactions of the American Ophthalmological Society 67: 1969; 462-534

Extracted Summary

Retinoblastoma is inherited as an autosomal dominant characteristic. A sporadic unilateral case will transmit the disease to 10 to 20 percent of his children, whereas a sporadic bilateral case will pass it on to nearly 50 percent of his progeny. When a family history is present, retinoblastoma is particularly apt to be bilateral. All retinoblastomas may be considered to be germinal mutations, albeit of highly variable manifestation. When one child with retinoblastoma is born to normal parents with no family history of the disease, there is a 4 percent chance that future siblings will be affected.

Retinoblastoma cells closely resemble primitive retinal cells that are destined to become receptor cells. The diagnosis is difficult when the tumor itself is not ophthalmoscopically visible. Typical calcification and seeding are almost pathognomonic signs.

The fourteen conditions most commonly confused with retinoblastoma are briefly outlined. The current results in 192 cases are presented. Pedigrees of the familial cases are appended as a reservoir for future calculations, since they are relatively rare.

It is easy to imagine that some local factor in a particular tumor could cause it to regress spontaneously. There is one example of a bilateral spontaneous regression in the literature and

there is one well-documented case in our own series. This would lead us to believe that there may be some systemic factor, immunological or otherwise, that allows tumors in certain individuals to be destroyed spontaneously. These patients deserve particular study since the behavior of their tumors could provide some clue to a new therapeutic approach.

Spontaneously Regressed Probable Retinoblastoma

Rubin ML; Kaufman HE

Archives of Ophthalmology 81: March 1969; 442-445

Extracted Summary

A 5-year-old girl with a clinical picture of spontaneously regressed probable retinoblastoma is presented along with color photographs of the lesion.

The cause of the spontaneous regression remains a mystery. One possible factor may be that the tumor outgrows its own blood supply and thereby becomes necrotic, perhaps with toxic products causing further destruction of the tumor cells. The process could arrest and eliminate the growing tumor. On the other hand, other systemic factors such as immune responses by the host may be involved since Meller (American Journal of Ophthalmology 32 (1915) 193-199) observed a simultaneous regression at three separate sites in the same eye.

Selected Case Report

A 5-year-old physician's daughter accidently discovered that the vision in her right eye was reduced over the left. The father did an ophthalmoscopic examination and swiftly brought her to us for consultation. There were no complicating factors during maternal pregnancy; the child was a full-term infant with no obvious serious illnesses occurring during childhood. Presently she is in excellent health.

The visual acuity was OD 20/25, OS 20/20. All the pathologic findings were limited to her right fundus. The vitreous was completely clear.

The optic nerve was of good color and sharply delineated. The foveal reflex was normally developed. About one-half disc diameter above the fovea and above the optic nerve was a large lesion measuring about 4 millimeters in diameter. In the center was a honeycombed mass with "cottage cheese" texture. The lesion was surrounded by some translucent, grayish tissue remnants. Through these and at the edge a pigment disturbance in the retinal pigment epithelium and choroid could be seen. No other tumors or pathologic findings were visible on scleral indentation in either eye.

Comment: The differential diagnosis included retinoblastoma, Coats' Disease, and perhaps larval granulomatosis. Because of the characteristic "cottage cheese" appearance, the most likely clinical diagnosis was retinoblastoma. Against the diagnosis of retinoblastoma were the following factors: The average age at which the active tumor is usually first seen is 13 months. Although initial discovery of retinoblastoma does occur in older children and even adults, these cases are rare. In addition, there were no other lesions besides that visible in the macular area in either eye. There was no family history of retinoblastoma and no involvement of the retinas of either parent nor of a 3-month-old brother. The lesion seemed inactive; there was no pinkish or fleshy "active-looking" tumor present here. The lesion itself looks very much like a retinoblastoma which has been treated and cured, but this patient received no treatment.

The presence of a lesion which looks like retinoblastoma with no obvious activity suggests that this probably is a rare case of a spontaneously regressed retinoblastoma. Although at least 15 other cases of spontaneous regression have been documented, it is not often diagnosed and photographed in vivo. Meyer-Schwickerath (written communication) has seen two such cases, both found in the parents of children with active tumor.

Unusual Retinoblastoma

Mortimer CB

Applied Therapeutics 12: 1970; 22

Extracted Summary

A case of apparently spontaneously regressed retinoblastoma with no treatment is reported. The most remarkable feature was the presence of well-defined calcium deposits within the lesion which were very reminiscent of successfully treated tumours.

Selected Case Report

Examination of a 9-year-old coloured girl showed that she was correctable in the right eye to 20/20 and the other eye had 20/20 without correction. Examination of the fundus revealed a lesion below and temporal to the macula, approximately four or five disc diameters in size, elevated above the retina and questionably cystic or fairly solid in appearance. The most remarkable feature was the presence of well-defined calcium deposits within the lesion. Skull x-rays confirmed calcium deposits. After finding this lesion the rest of the fundus was very carefully examined for other lesions as was the other eye. No other abnormalities were found.

It was diagnosed as a retinoblastoma and questioned whether surgical treatment should be considered. But the absence of fine vessels on the surface of the tumour were observed which is usually a criteria of activity in retinoblastoma. In addition the surface of the tumour was smooth rather than flaky or loculated as is so often seen. Thirdly the presence of this degree of calcification was very reminiscent of successfully treated tumours.

It was suggested that the child be seen by Reese in New York for further expert opinion. Reese confirmed the diagnosis, that is was undoubtedly a retinoblastoma, an apparent spontaneous remission. There are less than 30 reported in the world literature. Surgical treatment was not advised and it was merely suggested that the eye should be watched regularly and photographed and if activity were detected, conservative treatment with photocoagulation or radiation.

Spontaneous Regression of Retinoblastoma

A Report of Two Cases

Karsgaard AT

Canadian Journal of Ophthalmology 6(3): Jul 1971; 218-222

Extracted Summary

Two cases of presumed spontaneous regression of retinoblastoma have been presented: one resulting in a useful eye, and one in a phthisical eye. Neuroblastomata are closely related to retinoblastomata, if not the same tumour in another location. Spontaneous regression has been noted in some of these cases, and evidence is accumulating that this is due to the change from an active, aggressive type of tumour, usually fatal, through a process of maturation into an adult neuroganglioma type of lesion. It may be that some similar process occurred in our first case, especially in the mass below the disc.

Selected Case Report

In April 1960, an 18-year-old male presented himself for examination of his right eye. He stated that his left eye had been removed for a tumour when he was 21 months old. Vision in the right eye was 20/20. The pupil was normal in appearance and reactions. Examination of the fundus revealed a raised whitish mass with denser areas of pure white material (apparently calcium) above the disc, and a pearly white round mass surrounded by an area of choroidal degeneration below the disc. Field examination revealed two scotomata corresponding to these masses. An x-ray did not demonstrate any calcium in the right orbit. Over the past six and a half years there has been no visible change in the right fundus and vision is still 20/20.

The records of the 1943 operation were obtained from the Winnipeg General Hospital. The operative report simply stated 'Bilateral retinal detachment due to intraocular tumours. Left eye enucleated.'

The pathologist's report on the enucleated eye was as follows. 'Section shows a tumour mass the cells of which appear to be continuous with the retinal area of the eyeball. The tumour is very cellular the cells being hyperchromatic and varying in size and shape. It is very vascular. There are areas of degeneration and hemorrhage in the tumour. There are many mitotic figures and a tendency to pseudorosette formation. Diagnosis: Retinoblastoma.

We were able to obtain microphotographs of this tumour removed 25 years ago and these show the abovementioned features and also the presence of some calcium.

Family History: The patient's father had one eye removed in childhood because of an intraocular tumour. He died recently from carcinoma of the bladder. The patient has three uncles and eight cousins. His cousins have nine children and none of these relatives has shown any evidence of retinoblastoma. One aunt died at age 16, but the cause of death is not known to the patient.

This patient apparently had bilateral ocular tumours at 21 months of age. One eye was enucleated and a diagnosis of retinoblastoma made pathologically. The other eye was not touched or treated, but 24 years later exhibited two masses presenting the picture of spontaneous regression of retinoblastoma, or of successfully treated tumours; namely a white chalky appearance and surrounding pigmentary disturbances.

Spontaneous Regression of Bilateral Multifocal Retinoblastoma with Preservation of Normal Visual Acuity

Morris WE; LaPiana FG

Annals of Ophthalmology 6(11): Nov 1974; 1192-1194

Extracted Summary

A 24-year-old white man was found to have bilateral multifocal retinoblastomata. Spontaneous regressions had occurred and visual acuity was corrected to 20/20 in both eyes. There was one suspicious lesion in the left eye which will be followed closely and may become the subject of a future report.

Selected Case Report

The patient is a 24-year-old active-duty Caucasian soldier who presented to the Pentagon Dispensary for a routine eye examination. He had worn spectacles for correction of simple myopia since early childhood. The patient was in excellent physical condition and his past medical history was unremarkable. There was no family history of eye disease. He was referred to Walter Reed General Hospital for evaluation of the multiple fundus lesions seen in both eyes.

On examination, the patient was found to have an acuity of 20/20, right eye, with –1.25 –0.75 x 50 and 20/20, left eye, with –0.75 –0.75 x 180. The eyelids, ocular motility, pupil appearance and reactions, conjunctiva, cornea, anterior chamber and chamber angle, iris and lens were not remarkable. Intraocular pressure was within normal limits. Funduscopic examination revealed 3 tumor nodules in the right eye: between 12:30 and 1 o'clock meridians just posterior to the equator was a 6 disc diameter elevated heavily calcified tumor mass surrounded by a broad pigment annulus; in the 4 o'clock meridian, anterior to the equator, a 4 disc diameter lesion was noted. There was a central calcified mass and a broad atrophic annulus at the base. Both calcified masses were surrounded by tissues resembling "fish-flesh"; at the ora, in the 9 meridian, was a small chorioretinal scar. The optic disc, macula, blood vessels, and the remainder of the retina were normal. Funduscopic examination of the left eye revealed 2 tumor nodules: approximately 2 disc diameters inferior to the disc, between 7-8 o'clock, was an 8 disc diameter tumor mass with deep calcification and numerous telangiectatic vessels over the surface. there was a pigmented chorioretinal scar around the base of the lesion; at the equator, in the 5 o'clock meridian, was a heavily calcified mass with a pigmented area of chorioretinal atrophy at the base. There was, in addition, a large intraretinal cyst at 5:30 o'clock. The disc and macula were unremarkable.

The eye examination of the father, mother and paternal uncle of the patient was normal. Routine chest x-ray, metastatic bone survey, and orbital x-rays of the patient were normal. A clinical diagnosis of regressed retinoblastoma was made.

Histology and Spontaneous Regression of Retinoblastoma

Smith JLS

Transactions of the Ophthalmological Society of the United Kingdom 94: 1974; 953-967

Extracted Summary

A review of retinoblastoma is presented with example cases cited. It is of interest that all our spontaneously regressed tumours, bar one, are in males, though we also have one woman who retains her shrunken second eye which almost certainly contains an arrested tumour, and there is in addition an unproven female case with two shrunken eyes. Regressive changes certainly occur in shrunken eyes, but such histological evidence as we possess, taken in conjunction with the ophthalmoscopic appearance of these tumours, indicates that the process is one of spontaneous arrest rather than of regression.

Spontaneous Regression of Retinoblastoma

Nehen JH
Acta Ophthalmologica 53: 1975; 647-651

Extracted Summary

The present paper reports a case of spontaneous regression of a retinoblastoma leaving the eye with normal vision. The mode of regression is briefly discussed and the literature reviewed.

Possible causes for spontaneous regression of retinoblastoma are suggested: Ischemia, febrile illness, immunological mechanism, or calcium inhibition of tumor growth.

Selected Case Report

A 52-year-old man presented to an eye doctor with complaints due to presbyopia. As long as he could remember there had been a black spot in front of the left eye, to which he had become quite accustomed, and he had never consulted an eye doctor concerning this. There was no previous history of eye disease, nor was there any family history of retinoblastoma. The patient had three children aged from between 14 and 25 years, all of whom had normal ocular fundi, none of them had any children.

Visual acuity was normal in both eyes. The right fundus was normal, but in the left eye ophthalmoscopy revealed a vertically oval, atrophic area approximately 4 x 6 disc diameters in size, situated two disc diameters above the optic disc. This area was crossed by several choroidal and a few retinal vessels. There was some pigmentation around the periphery of the lesion and from the centre arose a white, chalk-like, lobulated tumour, prominating 5-6 dioptres and containing a thin vessel loop on its nasal edge. Small exfoliated particles were seen floating in the corpus vitreum. There was a partial corpus detachment in the upper and temporal regions with small glistening, white flakes on its posterior surface. The eye did not show any sign of inflammation. Radiological examination, using plain x-ray studies, revealed a small, irregular, central shadow which could represent calcification of a tumor.

Spontaneous Regression of Retinoblastoma

Khoudadoust A; Roozitalab HM; Smith RE; Green WR
Survey of Ophthalmology 21(6): May-June 1977; 467-478

Extracted Summary

Clinicopathologic evidence of bilateral spontaneous regression of retinoblastoma in three brothers is presented. The buphthalmic right eye and phthisical left eye of one of these persons were examined histopathologically. The two brothers of this patient both had phthisical left eyes, and those eyes were examined histopathologically. Both of those brothers also had clinically detected chorioretinal scars in their right eyes from regressed retinoblastoma. Three of eight children of one of the two brothers had bilateral retinoblastoma, and two of seven children of one other brother had bilateral retinoblastoma. Reports in the literature of 50 previous cases of total spontaneous regression of retinoblastoma from 1911 to 1975 are reviewed.

Spontaneous Regression of a Retinoblastoma

Brodwall J
Acta Ophthalmologica 59(3): Jun 1981; 430-434

Extracted Summary

A case of bilateral retinoblastoma is reported. The eye most affected was removed and the diagnosis was histologically verified. In the remaining eye, which was left untreated, the tumour regressed spontaneously. The retinal characteristics have not changed throughout 44 years of observation.

Selected Case Report

A 3-year-old girl from an eye-healthy family was in 1930 found to have a blind left eye in which a yellow-green light reflex was observed. Further examination revealed a grey-white retinal tumour which prominated distinctly and was divided in two by a deep cleft. Some retinal vessels and three irregularly formed light-reflecting white spots were seen on the tumour surface. They may have represented calcifications.

A 3 to 4 diopter prominating tumour was observed in the right eye. It was terminated by the optic disc and extended slightly to the temporal side of the macula. Retinal vessels overran the grey-white tumour which was surrounded by grey-brown retinitic areas. The left eye was removed and the diagnosis retinoblastoma was histologically verified. The other eye was left untreated.

Strangely the patient was not reexamined before the age of 16 years. A large chorioretinal atrophic area containing small pigmented spots was now seen. It corresponded to the location of the earlier observed tumour. The area was also surrounded by multiple pigment spots.

The patient counted fingers at 3 meters distance with excentric fixation. She was furthermore able to read normal bookwriting at 15 to 20 centimeters distance. This had enabled her to attend ordinary public school adequately.

At the age of 47 she was control examined. She could still count fingers at 3 meters distance, and she read normal bookwriting with moderate hypermetropic correction (+ 2). She had given birth to two eye-healthy children.

The same white, nearly circular, now excavated fundus area was observed. Its circumference was distinctly pigmented. An atrophic retina stretched as a transparent membrane over the excavation. In this membrane, related to the location of the macula a circular hole with a diameter of 1.5 millimeters was seen.

The intraocular pressure was normal and the visual field corresponded to the observed retinal changes.

Spontaneous Regression of Bilateral Retinoblastoma

Sanborn GE; Augsburger JJ; Shields JA
British Journal of Ophthalmology 66(11): 1982; 685-690

Extracted Summary

A 24-year-old black man was found to have bilateral, spontaneously regressed retinoblastoma that had previously been misdiagnosed as post-traumatic chorioretinal scarring. His son and half-brother both had bilateral viable retinoblastoma. The ophthalmoscopic and fluorescein angiographic features of this patient's fundus lesions included a calcified, whitish mass located centrally in one of the scars and a fine residual vascularity in another of the fundus lesions. The authors review the pertinent literature on spontaneous regression of retinoblastoma.

Supplemental References
Retinoblastoma

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American Journal of Ophthalmology 32(7): 1915; 193-199

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Hunter WS
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Additional Comments on Spontaneous Regression of Retinoblastoma
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Archives of Ophthalmology 82: Aug 1969; 298

Spontaneous Resolution of Probable Retinoblastoma
Brockhurst RJ; Donaldson DD
Archives of Ophthalmology 84: Sept 1970; 388-389

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Kemi C; Cheng-Minoda K
Acta Societatis Ophthalmologicae Japonicae 75: 1971; 681-91

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Pearce WG ; Gillan JG
Canadian Journal of Ophthalmology 7(2): 1972; 234-239

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Mehra KS; Gupta IM
Annals of Ophthalmology 6(9): Sep 1974; 919-922

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Antillon F; Garza E; Aleman P
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An Unusual Family with Retinoblastoma
Sabbah R; Berry FD; Schimmelpfennig W
Annals of Ophthalmology 13(5): May 1981; 595-596

Spontaneous Regression of Retinoblastoma in Mother and Son
Dhir SP; Gupta A; Gangwar DN; Jain IS
Postgraduate Institute of Medical Education and Research (India). Bulletin 16(1): 1982; 18-21

Spontaneous Regression of Retinoblastoma in Identical Twins
Migdal C
British Journal of Ophthalmology 66(11): 1982; 691-694

Bilateral Spontaneous Regression of Retinoblastoma with Dominant Transmission
Gangwar DN; Jain IS; Gupta A; Sharma PC
Annals of Ophthalmology 14(5): May 1982; 479-480

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Komatsu M
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Xia R; Luo C; Fang Q
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Assaf AA; Phillips CI
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Spontaneous Regression of Bilateral Retinoblastoma (Samoregresiia Dvustoronnei Retinoblastomy)
Krasnovid TA
Oftal'Mologicheskii Zhurnal (4): 1987; 248-249

Malignant Melanoma of the Eye

Spontaneous Regression of a Malignant Melanoma

Levison VB
British Medical Journal 1: Feb 19 1955; 458-459

Extracted Summary

A case of spontaneous regression of pulmonary metastases from a malignant melanoma of the choroid is described. Several theories concerning the aetiology are discussed, necrosis due to the tumour outgrowing its blood supply being considered the most probable.

Selected Case Report

The patient, a man aged 60, had the right eye excised at Moorfields Eye Hospital on February 21, 1951. The pathological report on the specimen was as follows: "Arising from the choroid in the superonasal quadrant of the eye is a large lightly pigmented mixed-cell malignant melanoma. Many blood sinuses are present in the growth and the reticulin content is light. There is some infiltration of the adjacent deep scleral lamellae, but in the sections examined there is no evidence of extraocular extension. The retina overlying the melanoma has been invaded and there is a retinal detachment on both sides of the growth. Microscopically this is a malignant melanoma of the choroid."

The patient was first seen at Addenbrooke's Hospital on February 26, 1953, when there was no clinical evidence of recurrence and the liver was not palpable. An x-ray film of the chest showed multiple small opacities at the base of the left lung, and examination of the urine at the same time showed melanogens to be present, and he was accordingly regarded as having pulmonary metastases. The presence of melanogens in this urine was shown by Thormahlen's nitroprusside reaction. No treatment was given.

Re-examination on July 8 showed disappearance of the pulmonary metastases and no melanogens in the urine. Since then repeated clinical and radiological examinations have shown no evidence of recurrence, and melanogens have not been present in the urine.

Necrosis of Malignant Melanoma of the Choroid

Reese AB; Archila EA; Jones IS; Cooper WC

American Journal of Ophthalmology 69(1): Jan 1970; 91-104

Extracted Summary

In a histopathologic study of malignant choroidal melanoma, an attempt has been made to show that inflammation and necrosis may confuse the clinical picture, delaying the correct diagnosis. It is believed that these findings may represent an immunologic response which causes tumor regression. Several cases are cited describing spontaneous regression of lesions interpreted as malignant choroidal melanomas, in some instances to the point of cure.

Choroid Melanoblastoma with Signs of Regression?

Scheffer CH; Binkhorst PG

Ophthalmologica 167(5): 1973; 433

Extracted Summary

In a brief communication two patients (a woman aged 68 years and a man aged 46 years) are described who, in all probability, presented clinically a choroid melanoblastoma. These patients only received regular control examinations and refused all therapeutic interventions. In both cases, a zone of scarification surrounding the tumor is visible, and, in one patient, the tumor has grown clearly less prominent in the course of the years.

Spontaneous Healing of a Malignoma?

Niethe U

Klinische Monatsblatter für Augenheilkunde und Augenarztliche Fortbildung 166(1): Jan 1975; 137-138

Extracted Summary

The author reports on the following case: A 46-year-old female patient had an inflammatory lesion of the sclera, similar to an episcleritic nodule, which was treated with cortisone eye drops without success. Because of increasing pigment release in the conjunctiva a malignant neoplasm was suspected. There was no further treatment. After the patient started a treatment of her own in the form of a grape diet without any other source of nourishment her symptoms disappeared.

Selected Case Report

The 46-year-old patient came to me concerning a slight inflammation of the left eye which had already been treated without success by a colleague. There was a slightly protuberant red spot on the limbus, similar to the often observed episcleritic nodule. The external layers of the surrounding cornea were opaque. Around the focus some irregularly shaped pigment ensilages of the conjunctiva were found. The vision of the healthy eye was –4,5 comb. cyl. –1,0 A 30 6/6. Left eye: –6,0 comb. cyl. –1,0 A 90 = 6/7. The ocular pressure of the right eye of 5.5/5 was normal, while it was slightly increased on the left eye with 5.5/3. The fundus corresponded to the myopic state of refraction and didn't reveal anything particular apart from some small choroidal-atrophic places in the periphery. The visual field was normal. As mentioned before, the findings were closest to the ones of an episcleritis and was locally treated with cortisone eye drops. The success was modest. The pigment release of the conjunctiva, however, increased considerably, so that a malignant neoplasm was suspected.

As I hadn't seen anything like that during my long experience, I advised the patient to consult Professor X. She did so on one of the following days. He basically came up with the same findings as described above. Considering the opaque conjunctiva and the pigment release, he suspected the beginning of a malignant melanoma. From his experience he advised waiting. Some days later Mrs. S. came back to my practice. The findings had hardly changed, but the pigment release increased.

As she was about to go on holiday to the Riviera, I recommended that she consult Professor Y, who at that time was considered an outstanding specialist. Professor Y was fascinated by this rare clinical picture. He had drawings and photos taken and sent them to a radiation specialist in Switzerland, who was supposed to obliterate the vessels of the conjunctiva with special radiation and by this stop a metastasization. The patient went to Switzerland, however, she didn't meet the Professor, as he was travelling. So she went on to her holiday to Italy.

When I saw the patient again, she had lost 35 pounds. Her explanation was the following: She had heard about a relative with a carcinoma who could achieve a considerable improvement by means of a grape diet. The patient adopted that idea and for six weeks ate nothing but grapes. This caused an enormous weight reduction. Her eyes had considerably improved. Vision and tension were identical on both sides. The pigment release which had covered the whole left half of the bulbus at the peak of the disease, had considerably decreased. She felt physically well. She returned to a normal diet, gained weight and had reached her original weight within a few weeks.

The pigmentation regressed further and eventually disappeared completely. The opaqueness shrank to a small scar. Only a small pink spot remains in the formerly mentioned place. Up to today those findings haven't changed. This has been for 15 years now, so we can be certain about the genuine healing.

Two years after the beginning of the disease I received a letter from Professor Y. He asked whether I knew what had become of the interesting case S. I replied that the patient was well after an intensive grape diet and that only a small pink scarry spot revealed the former location of the disease. (Noetic Sciences translation)

Spontaneous Regression of Choroidal Melanoma Over Eight Years

Chong CA; Gregor RJ; Augsburger JJ; Montana J

Retina 9(2): 1989; 136-138

Extracted Summary

The authors observed clinical regression of an apparent primary choroidal melanoma in a 66-year-old man over an eight-year interval. This regression was documented photographically and ultrasonographically. The authors discuss the possible mechanisms responsible for this clinical course.

Selected Case Report

A 66-year-old white man presented to his ophthalmologist in August 1980 with a several-month history of gradual, painless loss of vision in his right eye. Best corrected visual acuity at that time was 20/300 in his right eye and 20/40 in his left eye. Anterior segment evaluation revealed a moderately dense nuclear sclerotic cataract in each eye. Fundus examination of the right eye by indirect ophthalmoscopy and slit lamp biomicroscopy revealed a brown choroidal tumor located superior to the optic disc and macula associated with serous subretinal fluid extending from the lesion into the center of the macula. The tumor measured approximately 8 by 7 millimeters in basal diameters. Kretz A-scan ultrasonography showed the tumor to have low amplitude internal reflectivity and a thickness of 3.6 millimeters. Fluorescein angiography revealed an intralesional vascular network deep to the retinal circulation. Our clinical diagnosis was choroidal malignant melanoma.

Because of the relatively small size of the tumor, we recommended a period of observation to see if the lesion would grow before advising any tumor-specific therapy. Because the patient had a serous macular retinal detach-

ment and resultant impaired visual acuity in the right eye, however, we advised barrier photocoagulation to wall of the subretinal fluid from the center of the macula. This treatment was performed using the argon blue green laser. Two rows of 200 micrometer burns of sufficient energy to cause mild retinal whitening were placed in a broad U-shaped distribution between the inferior margin of the tumor and the fovea.

Follow-up examination in September 1980 revealed resolution of the serous retinal detachment and improvement in visual acuity to 20/40 in the right eye. The patient was seen on six occasions from November 1980 through May 1982. His visual acuity remained stable during that interval, and his serous macular retinal detachment did not recur. The tumor remained essentially unchanged in size and clinical appearance during this time. At a follow-up examination in April 1983, however, we noted that the tumor appeared slightly smaller. During the next 35 months, this tumor regression continued. The lesion became distinctly flatter and the basal margins receded centrally. A yellowish zone of chorioretinal atrophy developed around the residual lesion.

The patient underwent uncomplicated bilateral extracapsular cataract extraction with implantation of a posterior chamber intraocular lens in March 1986. His visual acuity returned to 20/20 in each eye after that surgery, and has remained stable at that level through follow-up in June 1988. The previously documented tumor regression continued postoperatively, leaving the patient with an almost completely flat residual brown lesion with a broad yellowish rim at the most recent follow-up evaluation.

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Zeitschrift für Augenheilkunde 19: 1903; 28-32

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Cairns FD
British Journal of Surgery 10: 1922; 290-293

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British Medical Journal 1: Feb 23 1924; 314-315

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Lukens C
American Journal of Ophthalmology 15: 1932; 434-437

Local Recurrence of Melanoma of Choroid Thirteen Years After Enucleation
Newton FH
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Death from Metastatic Melanoma Thirty-Six Years After Removal of Probable Primary Ocular Tumor
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Malignant Melanoma of Uveal Tract: Report of a Case with Death Thirty Years After Enucleation
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Archives of Ophthalmology 44: 1954; 381-394

Calcified Liver Nodules from Metastatic Primary Melanoma; Ocular Primary 15 Years Previously
Maddock WG; Lien RM
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Melanotic Sarcoma of the Choroid with an Unusual Period of Survival
Mayer WD; Beitman MR
Harper Hospital Bulletin 14: Sep-Oct 1956; 254-258

Prognosis of Malignant Melanoma of the Eye: Two Cases with Late Occurrence of Metastases
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Journal of the South Carolina Medical Association 57: Jul 1961; 308-309

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Zentralblatt für Chirurgie 86: 1961; 995-997

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Lambert SR; Char DH; Howes E Jr; Crawford JB; Wells J
Archives of Ophthalmology 104(5): May 1986; 732-734

Resolution of an Apparent Choroidal Melanoma
Williams DF; Mieler WF; Lewandowski M
Retina 9(2): 1989; 131-135

Spontaneous Regression of Orbital and Facial Hemangioma

Yancey WA
Western Journal of Medicine 108(4): April 1968; 300

Extracted Summary

Spontaneous regression of hemangioma is well documented by Kingery, Margileth and Moss. The purpose of this presentation is to report a case in which the phenomenon is shown with extraordinary clarity.

Selected Case Report

In the case presented here, the patient, first seen at four months of age, had a hemangioma in the orbit, periorbit and naries. The lesion was so large that it caused proptosis, and the cornea was not covered sufficiently to prevent exposure keratitis.

Consultation with the various tumor boards resulted in the opinion that the eyelid should be taped shut during sleep to protect the cornea. It was decided simply to observe the patient to determine whether the hemangioma became worse or better.

The child was seen two years later in Baja California, while the author was on a trip with the Flying Samaritans. The hemangioma regressed (without any treatment) to such an extent that the globe had receded into the orbit and the lids functioned sufficiently well to protect the cornea. Also, the child appeared to have fusion and good extraocular muscle function in all fields of gaze.

This case might serve to illustrate to apprehensive parents the rewards of patiently awaiting spontaneous regression of a hemangioma in a child.

Supplemental Reference
Benign Neoplasms of the Eye

Spontaneous Regression of a Choroidal Hemangioma Following Pregnancy
Pitta C; Bergen R; Littwin S
Annals of Ophthalmology 11(5): May 1979; 772-774

Neoplasms of the Brain and Other Parts of the Nervous System

Spontaneous Regression of Malignant Disease

Report of Three Cases

Margolis J; West D
American Geriatrics Society. Journal 15(3): March 1967; 251-253

Extracted Summary

Three documented cases of spontaneous regression of malignant neoplastic disease are presented. In 2 of the cases, severe infection was associated with the regression of cancer. In the third case

the removal of possible carcinogenic factors may have been related to the host resistance to cancer. The importance of reporting and studying cases of spontaneous regression of cancer in man is emphasized.

Selected Case Report

Case 1: A 43-year-old white male was admitted to the hospital on May 31, 1956, complaining of severe headache, which had been present intermittently for several years. During the previous few days there had been gradual development of a partial right hemiplegia with both motor and sensory components.

Physical examination showed a mild, chronic, choked disk with partial right hemiplegia. Arteriograms indicated a large tumor. At operation a tumor was found together with a large cyst; the cyst was drained and about 150 milliliters of fluid removed. A biopsy specimen was taken from the tumor, and both frozen sections and regular sections were diagnosed as astrocytoma, Grade III.

The patient was subsequently seen by us frequently. He had numerous convulsions at home and required large doses of sedatives and narcotics. He needed frequent treatment for overdosages of narcotics and barbiturates.

In September 1965, more than nine years after the diagnosis of astrocytoma was made, the patient died following several bouts of acute and chronic infection of the kidneys.

At autopsy, there were several abscesses of both kidneys but no evidence of astrocytoma was found despite very careful sectioning of the brain.

Comment: No treatment–surgical, radiologic, or chemotherapeutic–was administered at any time after the discovery of the inoperable astrocytoma. Fever and/or infection may be related to spontaneous regression of malignant new growths. This patient, subsequent to the exploratory craniotomy, had several bouts of acute and chronic kidney infection, and autopsy revealed multiple abscesses of both kidneys.

Congenital Neurofibromatosis

Multiple Subcutaneous Tumors with Spontaneous Regression in Twins

Eeg-Olofsson O; Lindskog U

Acta Paediatrica Scandinavica 72(5): Sep 1983: 779-780

Extracted Summary

Multiple subcutaneous tumors were found at birth in a pair of identical twins and the histological diagnosis was neurofibroma. The tumors disappeared within seven months. This disorder must be differentiated from congenital generalized fibromatosis, which usually shows a malignant course.

Selected Case Reports

A male identical twin born in 1970 after normal delivery weighed 2,570 grams. At birth, he showed multiple firm subcutaneous tumors, about 2 centimeters in diameter distributed all over his body. One lesion was removed, and the histological diagnosis was neurofibroma. Another tumor eroding the left temporal bone was also removed. He had no cafe-au-lait spots. The subcutaneous tumors started regressing spontaneously at the age of two months, and completely disappeared five months later. The development has been normal apart from hyperactive behaviour.

His second born twin brother weighed 2,430 grams. He also showed multiple subcutaneous tumors at birth. One was removed and the histological diagnosis was again neurofibroma. He had no skeletal involvement and no cafe-au-lait spots. The subcutaneous tumors completely disappeared by the age of seven months. As in his twin brother, the development was normal apart from hyperactive behaviour. He now has one small cafe-au-lait spot on the abdominal wall. There was no family history of neurofibromatosis.

Spontaneous Remission of Metastatic Paraganglioma

Nixon DW; York RM; McConnel FMS
American Journal of Medicine 83(4): Oct 1987; 805-806

Extracted Summary

Paragangliomas are rare neoplasms, most of which are benign, but malignant paragangliomas are occasionally encountered. The authors report a case of spontaneous remission of biopsy-proven metastatic pulmonary lesions from a malignant paraganglioma arising in the neck.

We have no explanation for the regression of disease in our patient. We consider the case interesting because of the histologic confirmation of the metastatic lesions in the lung and because the regression began five months after chemotherapy had been stopped because of lack of response.

Selected Case Report

A 60-year-old man found a mass in the right side of his neck in 1978. The mass was removed and histologically was a paraganglioma associated with a large nerve trunk. Five cervical lymph nodes contained no tumor.

He did well until July 1985, when multiple pulmonary nodules were found on routine chest radiography. One of these nodules was removed by wedge resection, and was metastatic paraganglioma on light microscopy. Numerous dense core granules and neural processes with neurotubules and neurofilaments were seen on electron microscopy, and the result of a Grimelius stain was positive, confirming the diagnosis.

Chemotherapy with 5-fluorouracil, streptozotocin, and dacarbazine was begun in August 1985. Chemotherapy cycles continued every three weeks until January 1985. A chest x-ray in February 1986 showed no shrinkage of the nodules, and chemotherapy was stopped. Follow-up chest radiography in March 1986 showed no change in the nodules. In June 1986, however, a chest x-ray showed slight regression of the nodules. This was five months after the last chemotherapy. No change in his diet, nononcologic medications, or lifestyle had occurred. Subsequent examinations showed further regression in August 1986 and October 1986. In January 1987, he was doing very well, and the nodules had not regrown.

Supplemental References
Neoplasms of the Brain and Other Parts of the Nervous System

On the Remittent Course of Spinal Cord Meningiomas
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Early Stages of Regressive Changes in Meningiomas: Electron Microscopic Studies
Jänisch W; Schreiber D; Dietz W
Zentralblatt für Allgemein Pathologie und Pathologische Anatomie 111: 1968; 236-241

Cerebral Gangliocytoma with Spontaneous Regression (Über ein Gangliocytom des Grosshirns mit Spontaner Rückbildung)
Noetzel H
Beitrage zur Pathologie 143(4): Jul 1971; 407-415

Spontaneous Disappearance of Changes in a Case of Congenital Neurofibromatosis
Jablonska-Ulbrych A; Furmaga M
Pediatria Polska 54(1): Jan 1979; 95-98

Neoplastic Angioendotheliosis: A Case with Spontaneous Regression and Radiographic Appearance of Cerebral Arteritis
LeWitt PA; Forno LS; Brant-Zawadzki M
Neurology 33(1): Jan 1983; 39-44

Transient Spontaneous Regression of Mass Effect with Glioma
Nakasu S; Nakasu Y; Kidooka M; Handa J
Acta Neurochirurgica 74(1-2): 1985; 53-56

Spontaneous Resolution of Multiple Hemangiomas of the Brain: Case Report
Abe M; Tabuchi K; Takagi M; Matsumoto S; Shimokama T; Kishikawa T
Journal of Neurosurgery 73(3): Sep 1990; 448-452

Neoplasms of Endocrine Glands

Thyroid Gland

Spontaneous Regression of Autonomous Nodules of the Thyroid: A Study of Eight Cases

Vianello Dri A; Bogoni A; Camerani M
Journal of Nuclear Medicine and Allied Sciences 24(1-2): Jan-Jun 1980; 63-71

Extracted Summary

In order to increase our knowledge of the natural history of autonomous hyperfunctioning thyroid adenoma (AHTA), we describe eight cases of spontaneous regression or resolution, which we selected from a group of ninety-four cases with different evolutions. The patients were examined between 1969 and 1976. With regard to the evolution of the nodules two kinds of behavior have been distinguished: regression, i. e., AHTA which lowered its degree of autonomous hyperfunction and which thereafter regrew with different activity in comparison with extranodular tissue; resolution, i.e., AHTA which regressed and never recovered during our observation.

When first examined, six of the eight patients (six women and two men) were found to be euthyroid, and two slightly hyperthyroid. Three of the euthyroid patients were shown, on the scintigram, to have a 'hot' nodule and three a 'warm' one. The two hyperthyroid patients had 'warm' nodules which were noticeably larger than those of the others.

In the cases of persistent euthyroidism, the regression or resolution was established by means of scintigraphy after a period varying from one to about four years. One of the cases with an initial 'warm' nodule developed a 'hot' nodule about two years after regression. In the two slightly hyperthyroid cases, the resolution of the nodule coincided with the disappearance of the symptoms.

These cases show and confirm the evolution of AHTA towards regression or resolution. In our patients this evolution was more frequent in the cases of autonomous nodules which on the initial scintigram showed the greatest dishomogeneity of distribution radioactivity within the thyroid nodule.

When the regression or resolution of AHTA occurs without the characteristic symptoms of haemorrhagic infarction of the adenoma, it can only be ascertained by means of scanning and/or in-vitro thyroid function tests.

Autonomous Thyroid Nodule Spontaneously Cured by Cystic Degeneration on a Thirteen-Year-Old Girl

Maunand B; Benoit A
Semaine des Hopitaux 56(15-16): Apr 18-25 1980; 785-787

Extracted Summary

On a girl of thirteen an autonomous thyroid nodule with hypersecretion has run its course towards hemorragic necrosis with suppression of hypersecretion. If partial cystic degeneration of autonomous thyroid nodule is frequent, it rarely occurs when extra-nodular thyroid tissue is completely suppressed, with clinical 'cure'.

Spontaneous Disappearance of an Atypical Hürthle Cell Adenoma

Bauman A; Strawbridge HTG

American Journal of Clinical Pathology 80(3): Sep 1983; 399-402

Extracted Summary

An easily palpable 5.5 x 2.3 centimeter nonfunctioning nodule that was diagnosed as an atypical Hürthle cell adenoma on cytologic study disappeared completely in less than one month without benefit of any treatment.

Selected Case Report

On July 5, 1981, a 23 1/2-year-old male presented for an asymptomatic nodule in the right lobe of the thyroid, which had been discovered one month previously. There was no history of radiotherapy to the head, neck, or chest. There were no signs or symptoms of hyperthyroidism or hypothyroidism. There was a firm, nontender, smooth, 5.5 x 2.3 centimeter mass in the lateral part of the right lobe. The 24-hour uptake of radioiodide was 29%, and the scan disclosed that the mass was hypofunctioning and intruded into the normal tissue, with a resultant concavity of the lateral margin of the normally functioning right lobe.

A FNAB with a 25-gauge needle was performed. Five passes in different parts of the nodule yielded similar material. No fluid was obtained. The nodule did not change in size during the process of aspiration. Smears were made of the aspirate and fixed by Cytospray.

The fixed smears were stained ultimately by the Papanicolaou technic. The fixed unstained material was mailed to Canada. En route it was delayed by a postal strike so that the cytologic report was not received until October 1981.

Microscopically, the aspirate was cellular and, apart from some contaminating blood, consisted entirely of thyroid epithelium of the Hürthle cell type. The cells were large, polyhedral, or oval, with typical eosinophilic granules in the cytoplasm. The nuclei were prominent, with a fairly prominent nuclear membrane and a distinct nucleolus but with a relatively low N/C ratio. There was some variation in nuclear size considered to reflect atypia but not enough to warrant a diagnosis of carcinoma. There was no admixture of lymphocytes or plasma cells. A few foam cells were present, suggesting some degeneration. These contained no hemosiderin. Apart from the Hürthle cells (and foam cells), no other thyroid epithelium or material, including colloid, was present so that a diagnosis of an atypical Hürthle cell adenoma showing evidence of some degeneration was made.

On October 16, 1981, the patient returned for reevaluation before surgical excision because of the cytologic report. At this time, the patient stated that following the FNAB on July 6th, 1981, there was minimal pain and swelling of the nodule, which subsided in a few hours. The next day, self-examination by the patient showed that the mass was smaller. It continued to shrink, until, by the 26th day, it no longer was felt. Because the nodule had been getting smaller the day after the FNAB, the patient decided not to take any of the prescribed l-thyroxine. Examination confirmed that no mass was palpable in the right lobe or any other part of the thyroid gland. The 24-hour uptake of radioiodide was 26%, and the scan now disclosed a normal bilobed thyroid gland with no trace of the original nodule. Because no lesion was present and the thyroid was barely palpable, no FNAB was attempted.

The patient was examined again on December 16, 1982, 17 months after the FNAB. Once again, the thyroid gland barely was felt, so that there was no lesion available for an FNAB. The 24-hour uptake of radioiodide was 30%, and the scan revealed a normal bilobed thyroid gland with homogeneous distribution of the radioiodide without any suggestive straightening of the lateral margin of the right lobe as in the scan of October 17, 1981.

Spontaneous Remission of Phaeochromocytoma

Huston N

New Zealand Medical Journal 101(845): May 11 1988; 248

Extracted Summary

In a letter, the author reports a case of spontaneous resolution of phaeochromocytoma. This has never previously been reported except in the setting of haemorrhagic necrosis, the outcome normally being fatal in these cases. This case documents the spontaneous remission of phaeochromocytoma, with reversal of cardiac failure and the return of heart size to normal. This remission has been documented by the return of the catecholamines to normal, the blood pressure to normal and the calcification of the adrenal lesion on CT scan.

Selected Case Report

A 20-year-old Maori woman presented in February 1985 at 7 weeks of pregnancy. She was said to have a 2-year history of personality change with sudden episodes of anger between periods of normal temperament. On examination she had exophthalmos, a blood pressure of 170/120 mmHg and papilloedema. Investigations performed at that time confirmed the diagnosis of phaeochromocytoma of the left adrenal, as indicated by a 24-hour urinary VMA of 170 mmoles/l and an ultrasound and CT scan showing a left adrenal mass of 4.4 centimeters. Treatment was initiated with atenolol and prazosin with a good response in her blood pressure. Arrangements were made for referral to the local endocrine centre, with regards to surgical management. Unfortunately the patient became adamant that no surgical treatment would be considered, involvement of the local psychiatric and social work services failed to change the position. At approximately this time she suffered PV bleeding and her pregnancy test became negative.

She was lost to follow-up until February 1987 when she again presented at 33 weeks of pregnancy. She was totally well and felt there had been a steady improvement since her last admission to hospital. Blood pressure was now 130/85 mmHg and urinary VMA was normal on three occasions. Her ECG and CXR was totally normal, and abdominal ultrasound showed a normal 35 week fetus with a left adrenal mass of 2.5 centimeter diameter. A normal female infant was delivered at 38 weeks of pregnancy, weight 3.38 kilograms. Postpartum mild hypertension developed, this settling spontaneously during observation as an outpatient to 130/90 mmHg. Her most recent urinary catecholamines are normal, and a CT scan shows a calcified lesion of 1.6 x 1.9 centimeters within the left adrenal. Interestingly she is now a cooperative patient.

Spontaneously Regressing Adrenocortical Carcinoma in a Newborn

A Case Report with DNA Ploidy Analysis

Saracco S; Abramowsky C; Taylor S; Silverman RA; Berman BW

Cancer 62(3): Aug 1 1988; 507-511

Extracted Summary

Adrenal cortical carcinoma is an uncommon neoplasm in children. Only a handful of congenital adrenal cortical carcinoma cases have been described. A newborn who had metastatic adrenal cortical carcinoma (skin metastases and cerebral lesions) is described. This patient underwent surgical resection of the right adrenal primary, but no further treatment was given. Hemihypertrophy developed in this patient by 2 months of age, and at 4 months of age spontaneous regression of all skin nodules and central nervous system (CNS) lesions was observed. Follow-up at 1 year shows the patient to be alive, well, and disease-free. Evaluation of the tumor included DNA ploidy analysis that showed the tumor to be polyploid, a pattern recently associated with nonmetastasizing adrenal cortical neoplasm. The observation of apparent metastatic disease that regressed spontaneously highlights the prognostic value of DNA ploidy analysis and raises the possibility of an adrenal tumor with properties similar to those of Stage IV-S neuroblastoma.

Spontaneous Regression of Prolactin-Producing Pituitary Adenomas

Vaughn TC; Haney AF; Wiebe RH; Kramer RS; Hammond CB
American Journal of Obstetrics and Gynecology 136(8): Apr 15 1980; 980-982

Extracted Summary

Two women evaluated for amenorrhea, galactorrhea, and hyperprolactinemia had radiographic changes of the sella turcica (localized erosion on trispiral tomography) suggestive of a pituitary tumor. Both patients experienced spontaneous regression of apparent prolactin-secreting adenomas with a marked decrease in the quantity of galactorrhea and a reduction of serum prolactin concentrations to the normal range. One patient noted a marked improvement of headaches and spontaneous menses resumed in the other patient.

Spontaneous Regression of a Postpartum Pituitary Mass Demonstrated by Computed Tomography

Zeller JR; Cerletty JM; Rabinovitch RA; Daniels D
Archives of Internal Medicine 142(2): Feb 1982; 373-374

Extracted Summary

An 18-year-old woman had postpartum thyrotoxicosis, hypercalcemia, and secondary adrenocortical insufficiency. A pituitary mass with suprasellar extension was demonstrated on computed axial tomography (CT). The patient subsequently became hypothyroid and normocalcemic, and repeated CT scanning showed that the pituitary mass had undergone a spontaneous regression in size. Computed axial tomographic scanning is an important modality for the evaluation of postpartum pituitary masses and their natural history. This case suggests that some patients with postpartum hypopituitarism and a pituitary mass need not have early surgical intervention but may be closely observed and treated by hormone replacement alone.

Pituitary Function in Patients with Evidence of Spontaneous Disappearance of a Pituitary Adenoma

Lindholm J; Bjerre P; Riishede J; Gyldensted C; Hagen C
Clinical Endocrinology 18(6): Jun 1983; 599-603

Extracted Summary

Forty-four untreated patients with an enlarged sella were studied (excluding patients with acromegaly, Cushing's disease, and those with radiological evidence of suprasellar extension). In 20 patients CT revealed a completely or partially empty sella. Based on recent studies we take this finding to signify the previous presence of a pituitary adenoma which has undergone complete or partial necrosis. Ten of the 20 patients had in fact experienced symptoms typical of a pituitary apoplexy compared with only one out of the other 24 patients. Adrenal, thyroid, and growth-hormone insufficiency occurred as often in patients with an empty sella as in those with a solid pituitary tumour. In contrast, plasma prolactin levels were much lower in patients with an empty sella than in patients with a solid tumour (11 vs 166 nanograms/ml). It is assumed that this discrepancy reflects previous necrosis occurring in an adenoma hypersecreting prolactin. These results emphasize the importance of taking the spontaneous course of pituitary adenomas into account when assessing the effect of various treatment protocols.

Spontaneous Regression of Pituitary Mass in Temporal Association with Pregnancy

Ikeda H; Okudaira Y
Neuroradiology 29(5): 1987; 488-492

Extracted Summary

We have encountered a case of pituitary mass which emerged and enlarged during pregnancy in a 29-year-old woman. On CT scanning the mass disappeared over the course of four months post-partum and was followed by pituitary hypofunction. The hypofunction was restricted to ACTH, GH, and PRL. The visual field defects, bitemporal hemianopsia, disappeared with disappearance of the pituitary mass on CT scanning, indicating that such deficits during this period were reversible. Based on the clinical course and laboratory data, this case is thought to have been lymphocytic adenohypophysitis. It was concluded that among cases of pituitary masses developing during pregnancy there are some cases which do not require surgical therapy.

Supplemental References
Neoplasms of Endocrine Glands

Un Caso Interessante: Regressione Spontanea di un Carcinoma Indifferenziato della Tiroide nell'Infanzia
Claudio F; Laraia G
Riforma Medica 79(1): 1965; 96-98

Spontaneous Biochemical Remission in Parathyroid Carcinoma
Klimiuk PS; Mainwaring AR
British Medical Journal 281(6252): Nov 22 1980; 1394-95

Disappearance of a Pulmonary Metastasis After Surgical Removal of an Adrenal Carcinoma
Gilchrist NL; Espiner EA; Donald RA; Perry EG; Jameson JB
New Zealand Medical Journal 96(734): 1983; 469-470