days after injury is reported. The reason for the absence of neurological signs in the presence of a large extradural lesion may be explained by the location and source of bleeding. Investigation for this lesion should be made in post-traumatic cases with symptoms suggesting increased intracranial pressure, even in the absence of focal neurological signs. Early surgical intervention is indicated to prevent pathological changes in the subjacent brain.

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OSTEITIS FIBROSA CYSTICA LOCALISATA OF THE SKULL
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The localized form of osteitis fibrosa cystica in the skull is a rare disease. It is with this entity that the present case report will be concerned. In the localized form, it must be borne in mind that there is no pathological change in the parathyroid glands nor are there associated changes in the blood calcium, phosphorus or phosphatase. The condition is mentioned only briefly in most treatises, the most complete being that of Chorobski and Davis. In a rather general discussion of bone cysts in the skull, they describe one case of the localized form of osteitis fibrosa cystica. Geschickter and Copeland consider some solitary bone cysts a form of osteitis.

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fibrosa cystica. These are found almost without exception in the long bones rather than in the skull, and the age incidence is 6 to 42 years. Compere\textsuperscript{3} writes in some detail of osteitis fibrosa cystica localisata and stresses the fact that the body chemistry remains unchanged. Albright\textsuperscript{1} in his recent monograph describes the localized form of the disease but makes no mention of its occurrence in the skull. The following case report concerns a 13-year-old girl who had been seen in the Clinic some years before and whose plain skull x-rays were normal at that time.

**REPORT OF CASE**

A 13-year-old colored female was first admitted to the Presbyterian Hospital in August, 1944. At that time, she had epileptic seizures which began in 1940. These were mild in nature and of the petit mal variety. The attack lasted 30 seconds. There was no aura nor loss of consciousness and the convulsive movements, clonic in type, involved all extremities. The birth and developmental histories were normal.

**Examination.** Temperature 99.2, pulse 85, respirations 20, B.P. 110/70. She was a normally developed 8-year-old colored female. The throat was injected. There was no evidence of abnormality of the skull. She had mild bilateral nystagmus and her gait was ataxic. The remainder of the neurologic findings were within normal limits. The ataxia and nystagmus had cleared by the time the patient was ready to be discharged from the hospital. Roentgenograms of the skull at this time were normal. The lateral film is illustrated in Fig. 1. A pneumoencephalogram showed normal ventricles and normal cortical markings. No EEG was done during this admission. She was placed on phenobarbital gr. ss b.i.d. and discharged.

**Interval History.** During the next 5 years, the child got along fairly well. She had occasional seizures similar to those described at the time of her first admission. On May 25, 1949, gastroenteritis developed, presumably due to food poisoning, and during this illness her seizures became more frequent. Once again too, she became somewhat stuporous, nystagmus developed and her gait was ataxic. All of these cleared after several days. During this time she was seen in the Clinic and new x-rays of the skull were taken. These showed a single, rounded area of bone destruction with a sclerotic margin in the left frontoparietal area (Fig. 2). Because of this finding, it was felt that the patient should be readmitted to the hospital for further evaluation.

![Fig. 1](image1.png) ![Fig. 2](image2.png)

**Fig. 1.** This shows film of skull made prior to the development of the cystic lesion.

**Fig. 2.** Film taken 5 years later, showing the cystic area of bone destruction in the frontoparietal skull area.
2nd Admission. Temperature 98.6, pulse 72, respirations 20, B.P. 120/80. The girl was somewhat retarded mentally. The only positive neurologic finding was an increased right patellar reflex. Rbc. was 3,928,000, hb. 11.3 gm., wbc. 6,800. Urinalysis was negative. Blood calcium was 10.3 mg./100 cc., blood phosphorus 4.9 mg./100 cc. and alkaline blood phosphatase 10.9 Bodansky units. The EEG was interpreted as being within normal limits for her age. A repeat pneumoencephalogram showed normal ventricles and cortical markings. Intravenous pyelograms and x-rays of the chest, spine and long bones were all normal.

Operation. Because of the questionable nature of the lesion and particularly since the question of metastatic tumor had been raised, it was decided that surgical exploration with removal of the area of skull should be carried out. On Aug. 2, 1949, an ordinary plastic scalp flap was turned over the area of cystic bone. The lesion was seen to be elevated above the surrounding cortex and measured 4.5 cm. in diameter. Two burr holes were placed opposite one another at the periphery of this lesion and these were then connected in circular fashion with the DeVilbiss rongeur. The inner table showed no evidence of erosion nor was there any indication that the cyst was exerting pressure on the underlying cortex. A tantalum plate was inserted (Fig. 3) and the wound then closed in layers. Sutures were removed on the 9th postoperative day and the wound was well healed.

Pathological Report. The specimen consisted of a roughly circular segment of hyperostotic bone measuring 4 cm. in diameter and 1 cm. in thickness. It contained portions of two burr holes at the periphery and a suture line traversed the center. On microscopic examination (Fig. 4) there was evidence of atrophy of bony spicules and the formation of some new bone. The marrow was replaced by fibrous connective tissue, some of which was vascular. This tissue was in various stages of development. Microscopic diagnosis: Osteitis fibrosa cystica.

COMMENT

Localized osteitis fibrosa cystica in the skull is a rare disease. The x-ray picture is that of an area of bone destruction with a surrounding sclerotic margin. It must be differentiated from metastatic tumor and it was this question in particular in the present case that demanded surgical investigation. Of special interest was the availability of x-ray studies of the skull made prior to the development of the lesion.
It was also pointed out that the changes in calcium, phosphorus and phosphatase that occur in the generalized form of osteitis fibrosa cystica are not seen in the isolated type. Finally, a brief description of the operative procedure carried out was presented and the microscopic picture of the disease described.

REFERENCES

SYSTEMIC BLASTOMYCOSIS WITH SPINAL CORD INVOLVEMENT

CASE REPORT

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This case is reported because the unusual clinical course and pathological aspects make it important not only in the differential diagnosis and treatment of surgical conditions of the spinal cord but also as a rare manifestation of an already uncommon grave disease. Blastomycosis usually takes either a cutaneous or a systemic course. The cutaneous type tends to heal, whereas the systemic type is characterized by chronicity, and widespread infection in the lungs, subcutaneous tissues, bone, and internal organs. Prognosis in this type is extremely grave.

Blastomycosis itself is relatively rare, since up to 1939 Martin and Smith reviewed 347 proved and presumptive cases. In only 16 of these cases was the central nervous system involved. The usual course of such involvement is that single or multiple abscesses develop in the cerebrum, cerebellum, and brain stem, with a basilar purulent meningitis as a part of the generalized systemic variety. However, in 1940, Craig, Dockerty, and Harrington reported an intravertebral and intrathoracic extradural mass that simulated a dumb-bell tumor. It proved to be a blastomycotic lesion and it is probably the first case report of such a lesion simulating a tumor in the spinal canal. In Friedman and Signorelli's case the blastomycosis involved only the meninges of the brain and spinal cord. Detailed descriptions of the usual course and pathology of both types of blastomycosis have been described by Montgomery and Ormsby, Wade and Bel, and Stober. With regard to the identification and isolation of Blastomyces dermatitidis and differential features of mycotic lesions, Stoddard and Cutler, Martin and Smith, and Hassin have covered the important points.

REPORT OF CASE

J.M., a 40-year-old white woman, referred by Dr. L. Kratz, was admitted to Mercy Hospital on March 7, 1948, with a diagnosis of myeloma or spinal cord tumor. Her chief complaints were numbness beginning in the calves of the legs and reaching the waist, and progressive