

tization. It was then transferred to the Alexandra Hospital for contagious diseases. On its arrival there at 9.15 p.m. the same evening, the baby was given another 10,000 units of anti-diphtheritic serum, as the dyspnoea had become more marked. At the Alexandra Hospital the child's pharynx was carefully examined for evidence of a membrane, but as nothing abnormal was found an x-ray of the chest was taken, in order to see if the signs of pneumonia were still present. This showed evidence of a subsiding inflammation in both lungs, but besides this a large screw was revealed in the region of the larynx, as seen in Fig. 1. Immediately after the discovery of the foreign body the patient was sent by ambulance to the Oto-laryngological Department of the Royal Victoria Hospital, as she was now much worse.

There was nothing abnormal in the family or personal history. The condition of the child can perhaps be best appreciated by quoting the house-surgeon's report on admission, "The patient lies in the semi-orthopnoic position and appears desperately ill. The breathing is very rapid and noisy, about 50 respirations to the minute—colour is poor—the lips are definitely cyanosed—the *alæ nasi* move on respiration. The child is well developed and well nourished—she does not cry and appears to be in a semi-comatose state." The report on the respiratory system was as follows: "The chest is fairly well developed—there is a suggestion of beading of the ribs. On inspiration there is a definite indrawing of the lower intercostal spaces. The percussion note is resonant throughout. The breath sounds are very loud and harsh, with prolonged expiration, and many moist bubbling râles are heard throughout the chest during both inspiration and expiration. No areas of consolidation are found."

Owing to the marked dyspnoea and prostration no time was lost in exposing the larynx by means of an infant-size Jackson's laryngoscope. This was done without anæsthesia and the purulent discharge which covered the larynx removed. Although this procedure required only a minute or two the child's breathing ceased on two occasions. This was due to the fact that the laryngeal obstruction was almost complete and the slightest retraction of the head on inserting the laryngoscope was enough to cut off the airway. After

applying suction, the larynx was examined, but it was so inflamed and œdematous that the normal landmarks were distorted and could not be recognized. In the centre of this angry-looking and swollen tissue, instead of the vocal cords, all that could be seen was a small black object. On closer inspection it proved to be part of the flat surface of the head of the screw, the slit running diagonally.

By means of a pair of alligator forceps the head was grasped and the screw removed without difficulty. Within a few minutes the dyspnoea was relieved and the child's colour improved. The following morning the rectal temperature rose to 107°, probably from the trauma of the manipulation, but it soon returned to normal.

On subsequent questioning the father ascertained that an older child, a boy of two and a half years, had placed the screw in the baby's mouth more than 24 hours before it was removed.

The interesting features of this case were: (1) the finding of bacilli resembling the Klebs-Löffler in the nose and pharynx; (2) the large size of the screw found in the larynx of an infant two and a half months old; and (3) the reactionary fever of 107°.

The child made an uneventful recovery, and within a few days was discharged from the hospital.

A CASE OF BLASTOMYCOSIS

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A case of generalized blastomycosis, discovered and treated at the Manitoba Sanatorium, is of interest because of the great similarity of this disease to tuberculosis, and because it is one of the few cases that have gone on to recovery. A review of the recent literature shows that blastomycosis is much more common than was formerly believed, and that the generalized disease is fatal in about 95 per cent of cases.

The patient, N.M., aged 15 years, was admitted on July 21, 1926, complaining of cough eight to ten times a day; expectoration (one ounce, purulent and blood-streaked); a loss in weight of thirty pounds in six months; pain in

the chest and back; sore throat and hoarseness; epigastric distress; nausea, and constipation.

Personal and family history.—His health had been good until February, 1926, when his left foot became sore and swollen. Three weeks later the lesion broke down, discharging dark green pus. About this time the boy began to cough and expectorate. On May 19th, the foot was incised, and the fourth and fifth metatarsal bones removed. They were considered to be tuberculous by the doctor in charge of the case. On June 1st sores appeared on the back of the right leg and right arm.

The patient was an Austrian by birth, having come to Canada when two years old. He had been at work clearing land in the summer, trapping in the winter, and was living in a dark

The patient was transferred to St. Boniface Hospital and the left foot amputated on August 9, 1926. The laboratory report was tuberculosis of the bones and soft tissues. He returned to the Sanatorium on August 30th and his general health improved, but the ulcers on the right leg and arm failed to heal. In November a diagnosis of blastomycosis was made by Dr. D. F. MacRae, and was confirmed by finding blastomyces in smears and cultures from the ulcers. These were treated locally with 1 per cent copper sulphate solution. Potassium iodide was given internally, and heliotherapy was pushed. All the sores healed in about a month. X-ray films, made January 3, 1927, showed the lungs clear and fairly normal in appearance. A series of intradermal tuberculin tests caused no local

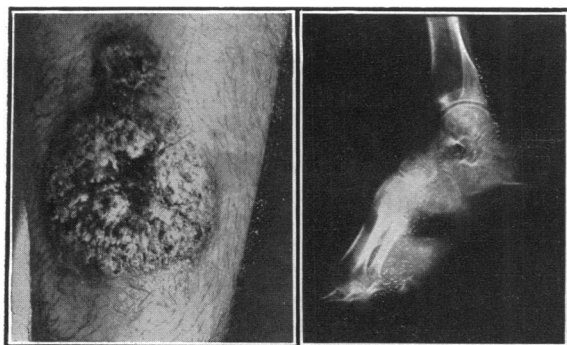


FIG. 1.—Ulcer on calf of right leg.

FIG. 2.—Left foot at the time of admission showing abscesses and extensive destruction of bones.

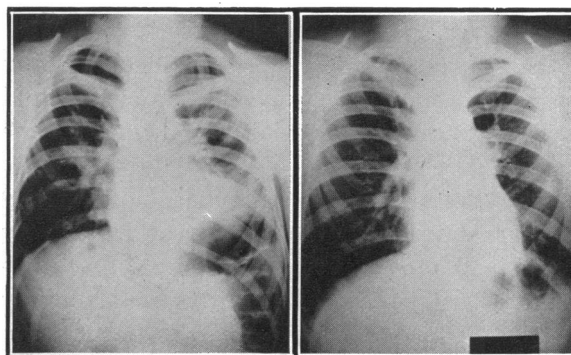


FIG. 3.—Chest on admission, showing gross disease in left lung, and infiltration in right.

FIG. 4.—Chest on discharge, showing marked clearing in both lungs.

and rather damp log shack. He had had chicken-pox one year before the onset of the present illness. A sister had died of tuberculosis ten months before.

Physical examination showed a pale, thin boy. His temperature was 100°; pulse 108. On the right leg and left foot there were large granulating ulcers with a purulent discharge.

The larynx was reddened. In the chest tactile fremitus was slightly increased; there were a few post-tussive crepitations on the left side, but no signs on the right. The x-ray films showed gross disease throughout the whole of the left lung, with bronchopneumonic areas about the root, and fairly widespread infiltration of the whole right lung. X-ray films of the left foot were interpreted as showing an extensive osteomyelitis. No tubercle bacilli were found in the sputum, which was muco-purulent. The urine was normal.

or systemic reaction. The sputum was repeatedly negative for tubercle bacilli, but had ceased before blastomycosis was considered.

The patient was discharged on February 24, 1927, in good health and has remained well since.

DISCUSSION

A review of the literature in 1927 conveyed the idea that blastomycosis was a rare disease, found only in central Europeans and negroes, but since that year studies indicate the disease to be quite common, even in the temperate zones. Ferguson and Marett¹ state that in Jersey monilia infections of the lungs are as common as tuberculosis, and that the two infections are very frequently combined. The remarkable similarity of the clinical symptoms, gross and microscopic lesions, to those of tuberculosis, is stressed; only by finding the organism in the

sputum discharges or by microscopic section can the diseases be differentiated. Healy and Morrison² state that sputum should not be considered negative for yeast organisms unless cultures are negative. Studies in the histology of the lesions of blastomycosis and tuberculosis have been reported by Miller,³ Medlar,⁴ D'Aunoy and Bevan,⁵ and others. A careful investigation of the cultural characteristics of blastomyces and similar fungi has been made by Castellani⁶ and Michelson.⁷ A book "Fungous Diseases," by H. J. Jacobson,⁸ published recently, presents a complete picture of all these organisms with the diseases and lesions produced by them.

Localized cutaneous infections of blastomycosis are common and benign. Systemic infections are fatal in 95 per cent of cases. A specific allergic response to moulds is thought to account for this high mortality in generalized disease. The roentgenogram always indicates a far graver condition than is shown by a physical examination of the patient. The coincident onset of symptoms in pulmonary and other areas is very suggestive of a non-tuberculous condition in what is otherwise clinically a tuberculosis picture.

The literature shows no particular treatment for blastomycosis to be really efficacious. Potassium iodide, up to 30 grains t.i.d. and vaccines, are advocated. In our case the early amputation of the foot, the worst focus of disease, apparently enabled the natural defences of the body to overcome the remaining disease.

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ANTERIOR DISLOCATION OF THE OS CALCIS

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The following case represents an extremely rare injury. The fact that, presumably in consequence of repeated insult, acute bone atrophy (Sudeck's) occurred, makes it of greater interest. The response of the condition of acute bone atrophy to protected weight-bearing also deserves attention.

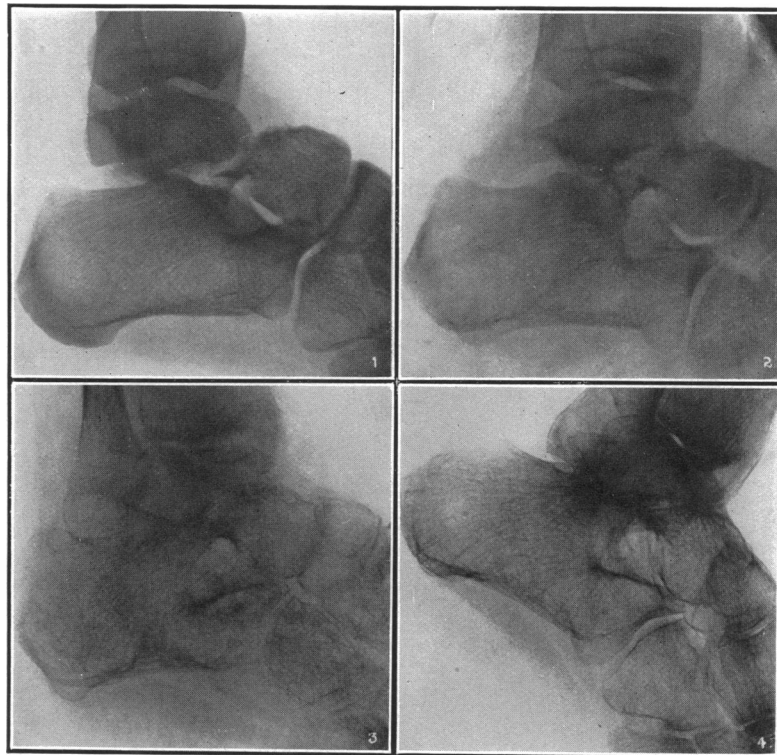


FIG. 1.—December 14, 1926, displacement forward of os calcis, associated with fracture of neck of astragalus.

FIG. 2.—December 17th; result of second operation.

FIG. 3.—March 21, 1927, acute bone atrophy (Sudeck's) is well marked.

FIG. 4.—July 5th; absence of patchy atrophy and recalcification of bone well established.

CASE REPORT

V.T., 21 years old. On November 30, 1926, this man fell from a height and injured his left foot. He was admitted to my care at the Western Division of the Montreal General Hospital one week later. Radiological examination of the left foot showed that he had suffered a fracture of the neck of the astragalus, together with a forward dislocation of