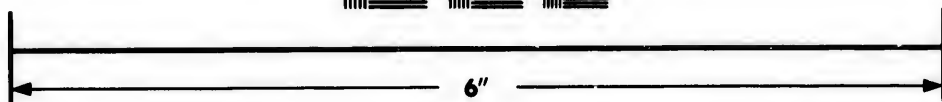
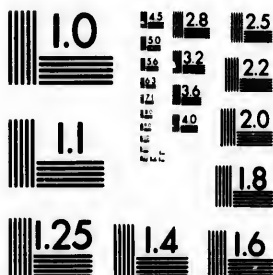


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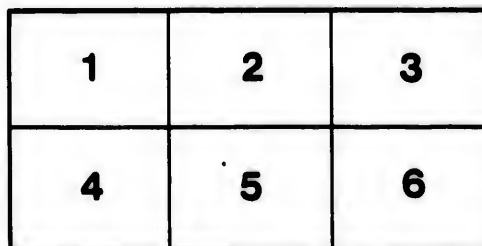
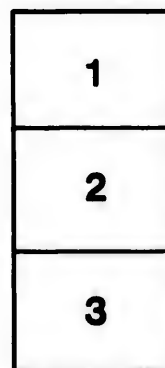
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A CASE OF SARCOMA OF THE SKIN AND  
CELLULAR TISSUE ABOUT THE ANKLE,  
WITH REMARKS.<sup>1</sup>

BY FRANCIS J. SHEPHERD, M.D., C.M.,  
PROFESSOR OF ANATOMY IN MCGILL UNIVERSITY, SURGEON TO THE  
MONTREAL GENERAL HOSPITAL.

THE clinical interest of the following case furnishes me with a sufficient excuse for its publication.

Edward M., aged eighteen, native of Switzerland, a delicate-looking youth, came under my care at the Montreal General Hospital in April last, suffering from an ulcerated swelling about the left ankle. No history of struma or rheumatism in his family, and he himself has, with the exception of the present disease, always been healthy.

He gave the following history of his case :

Some six years ago, while running, he fell and injured his left ankle-joint. The doctor told him it

<sup>1</sup> Read before the Montreal Medico-Chirurgical Society, June 27, 1884.

was dislocated, but after six weeks' rest the pain disappeared, and he could walk as well as ever; the swelling about the joint due to the injury, however, never entirely disappeared. A year subsequent to the above-described accident the ankle again became painful, and the swelling and tension markedly increased. His doctor, thinking an abscess had formed, opened the swelling, but failed to get pus, blood only escaping from the incision; this incision has never entirely healed, but ever since has remained open as a sinus, discharging a thin sanious pus. Three years ago he was kicked by a horse on the affected ankle, and this caused an aggravation of the pain and swelling. The ankle-joint itself since the first accident has apparently never been affected, and its movements have always been free and comparatively painless, but the swelling on the inner side has been slowly increasing in size, and at different points sinuses, which discharge a thin pus, have formed.

When I first saw him, the parts about the inner side of the left ankle-joint were of a shiny, dusky-red color, and considerably swollen. The swelling extended from a point several inches above the tip of the internal malleolus to below the tarsal joint, it also extended laterally to the sole of the foot, half way across the instep, here the skin over the swelling was quite normal. There was also fulness over the tendon of the Achillis and the parts behind the internal malleolus. Near the edge of the swelling were several reddish

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tuberculous nodules the size of large peas. There were also a number of sinuses in the upper part of the swelling, and near the centre a spot of ulceration the size of a ten-cent piece. The swelling, which was not at all well defined, on pressure gave a sense of fluctuation, or rather felt like a mass of some semifluid substance. During pressure no pus exuded from any of the sinuses. There was but little pain in the part, and patient only complained when his foot was handled a little roughly. On probing the sinuses carefully no necrosed or carious bone could be felt.

Not feeling perfectly sure of the diagnosis, but supposing from the semi-elastic sensation conveyed by pressure, and also the history of the case and the evident healthiness of the ankle-joint itself, that the disease was some form of neoplasm, I decided to place the lad under ether and carefully explore the parts affected. This I did after observing the case for a day or two. I made a free incision in the long axis of the swelling over the inner malleolus, and after cutting through very thick infiltrated skin, came upon a lot of tissue looking like granulation-tissue; this substance appeared to be in pockets, and could be squeezed out by using some force. The lining membrane of these pockets was smooth and shiny. I cut through the whole thickness of the swelling and was still superficial to the annular ligament of the ankle and the tendons which pass under it; the movements of the tendons were in no way interfered



with. Feeling sure I had to do with a new growth, I sent some of the substance taken from the pockets to my friend Dr. Wilkins, for microscopical examination, and he pronounced it a very good example of round-cell sarcoma.

On consultation with my colleagues, amputation of the leg was decided on. The lad and his friends, on learning the serious nature of the disease and the danger of delay, at once consented to the amputation.

I omitted to mention that the glands in the groin were much enlarged, one, below Poupart's ligament, had increased to the size of a pigeon's egg. I looked upon this condition of the glands as purely inflammatory, knowing the rarity with which sarcomatous tumors secondarily affect the glands, and also knowing that they had been enlarged ever since the first accident. In the interval between the making of the exploratory incision and the amputation, the swelling had slowly increased in size and extent, and the incision had rapidly filled up with coarse granulation-tissue.

I amputated the leg on May 17th at some distance above the disease, dressing the stump, as I usually do in amputations, with iodoform and pads of sublimated jute. In this case I made use of decalcified bone drains, which, owing to their collapse, had to be replaced on the second day by rubber tubes. From this time the case progressed favorably, the tempera-

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ture after the third day never reaching 99°, and in less than three weeks' time, with three dressings, the wound was practically healed. The enlarged glands below Poupart's ligament gradually diminished in size; and when last seen a few days ago, the lad was in good condition, felt well and strong, and the enlarged glands had almost entirely disappeared. Whether or not he will have a return of the tumor in some other part remains for time to show. Owing to the long duration of the growth and its being of the most malignant variety of the sarcomata, it is possible that infection may have been conveyed to other parts.

This case is instructive chiefly on account of the difficulties it presented for diagnosis. In the first place, the situation was an unusual one for a sarcoma; again, it resembled more some chronic form of inflammation connected with periosteal or bone disease than a sarcomatous tumor and it was only after a careful exploratory incision and a microscopical examination that its true nature was made out. I need not dwell upon the importance to the patient of a correct diagnosis in these cases, for sarcoma, and especially the round-cell variety, unless removed, is a fatal malady. The patient before coming under my care had been treated for some months on the supposition that his affection was of an inflammatory nature. What led me to suspect a new growth was the existence of apparent fluctuation with the presence

of numerous sinuses, the freedom from pain on movement of the joint and the absence of any carious necrosed bone.

The long duration of the tumor, and the fact that it can be directly traced to traumatism as its cause, add further interest to the case. Cases have lately been reported by Mr. Barwell and others in which injury was followed by an acute and rapidly growing sarcoma; this is comparatively rare, but slowly growing sarcomata not infrequently follow injuries, a fact which was pointed out by Billroth many years ago.

It is of rare occurrence that the skin of the part about the foot is affected with sarcoma; the most common forms of sarcoma of the lower extremity being connected with bone itself or the parts in connection with bone. When the skin is the seat of a sarcomatous tumor it is of the spindle-cell variety, a rule, round-cell sarcoma being very rarely seen in connection with the skin.

Prof. Markoe, in *THE MEDICAL NEWS* of April 1884, reported a series of cases of what he called "Sarcoma of the Sheaths of Tendons about the Foot." His cases closely resemble that which I have just narrated to this Society. The skin, however, was not involved in Dr. Markoe's cases, the disease being confined to the parts immediately beneath. It seems to me that Dr. Markoe's description of his cases hardly bears out the idea put forth by him that

the tumors were connected with the sheaths of the tendons.

One thing is certain, that these sarcomatous tumors about the foot are of rare occurrence, and if their true nature is not ascertained in time the life of the patient will be endangered, for though at first apparently innocent, sooner or later they develop the greatest malignity.

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