cate the primary lesion and the cervical metastasis.

The present-day trend in management of carcinoma of the tonsil is towards irradiation, as there is a tendency of the malignant growth to spread early to the adjacent tissues and to the cervical nodes. If the lesion has not extended beyond the anterior pillar, Hulbert[9] advocates external irradiation with x-rays or radium; in lesions involving the anterior pillar itself, extending downward and forward, as in our case, he advocates the use of two rows of radium units, one medial to the jaw and one in the tongue.

Our patient is now undergoing a course of radiation therapy in the Allan Blair Memorial Clinic, Regina, where treatment was commenced through two opposing lateral fields to the tonsillar area, which took in as well the metastatic lymph-gland. A tumour dose of 4,500 r is to be delivered in 20 treatments over four weeks.

Though irradiation therapy is widely used, it does not give satisfactory results as yet: the five-year survival rate after irradiation ranges from 7.2% to 30%, and differs with each review of carcinoma of the tonsil.

PROGNOSIS

The prognosis is poor, because the diagnosis is made late in the disease, which in its early stage is asymptomatic. Our patient had first noticed his symptoms two months previously, but the extent of his tonsillar lesion proves that it took more time than that to develop. It is usually from 6 to 12 months before a patient with carcinoma of the tonsil seeks medical advice, since sore throat does not occur until the neighbouring structures become involved. For this reason the prognosis depends upon the extent of the lesion when first seen. It depends also upon the pathological type of the tonsillar cancer and its radiosensitivity. In well-differentiated tumours, which are more radioresistant, like the epidermoid carcinoma in our case, the prognosis is worse than in poorly differentiated tonsillar cancer.

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MALIGNANT DEGENERATION IN VARICOSE ULCERS OF LOWER EXTREMITIES*

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MALIGNANT DEGENERATION of a varicose ulcer is of infrequent occurrence. Knox[1] in 1925 reported the findings in 59 cases collected from the literature. According to Tenopyr and Silverman[2] the incidence of neoplastic changes in 1000 cases of chronic leg ulcers was 0.4%.

The purpose of the case presentation which follows is to re-emphasize the fact that long-standing varicose ulcers may undergo malignant degeneration.

A.A., a 66-year-old single male, was admitted to the Jewish General Hospital on May 8, 1956. For 25 years he had had bluish discoloration, scaling and varicose ulceration of the skin on the lateral surface of his right leg just above the external malleolus. Severe local infection necessitated hospitalization in 1930 and 1939. Self-treatment with ointments and pressure bandages failed to heal the discharging ulcer which in February 1956 became foul-smelling.

The area of ulceration now measured 4 x 6 cm. It was covered by thick yellowish-brown crusts with foul purulent fluid seeping through the crevices. *Proteus vulgaris* sensitive to neomycin was recovered from the discharge. A cauliflower-like growth measuring 2 x 3 cm. was noted in the lowermost part of the ulcer. Several hard and non-tender lymph nodes 1-3 cm. in diameter could be palpated in the right inguinal region, and a few considerably smaller ones in the right popliteal fossa.

The patient was mildly anæmic. The hæmoglobin level was 10.3 g. %, and the leukocyte count was 13,700 per c.mm. The Wassermann test was negative. The general physical examination was essentially negative. Following correction of the anæmia by means of blood transfusions and local preparation with saline compresses and antibiotics, a biopsy of the ulcer was performed on May 15, 1956. The pathologist, Dr. M. A. Simon, reported the presence of a well-differentiated squamous-cell carcinoma, the seat of severe chronic inflammation.

On May 19, 1956, a below-knee amputation combined with radical inguinal node dissection was carried out under general anæsthesia. The resected lymph nodes were free of metastasis.

The patient became acutely depressed in the immediate postoperative period and required reserpine and shock treatment. Wound infections gradually responded to local therapy. He was discharged on July 10, 1956.

DISCUSSION

Broders[3] in 1921 reported 2000 cases of squamous-cell epithelioma. The skin of the lower extremity was involved in but six instances. Broders did not specify whether or not these carcinomas developed in an area of stasis ulceration. These patients were observed at the Mayo

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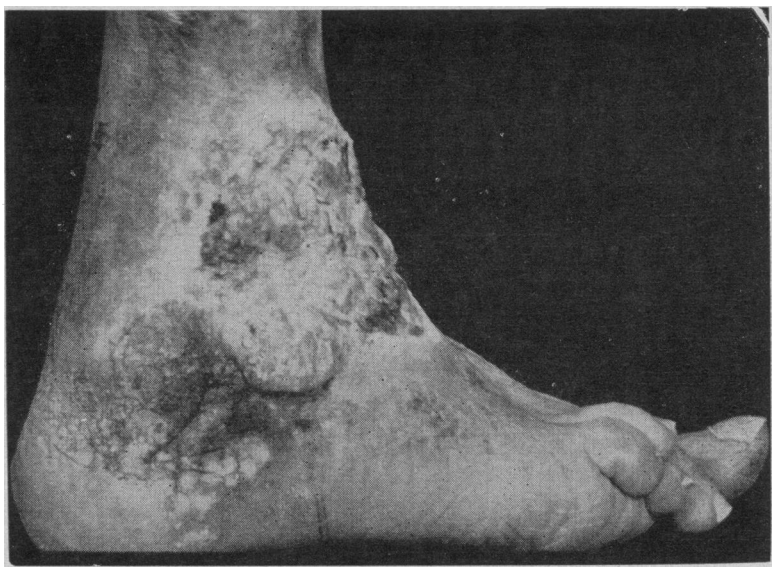

Fig. 1.—Malignant degeneration in long-standing stasis ulcer. Note obvious neoplastic change in inferior ⅓ of lesion.

Clinic during the period November 1, 1904, to July 22, 1915. De Asis[4] in 1923 collected seven cases from the Barnes Hospital, and 11 from the Barnard Free Skin and Cancer Hospital. In only two instances in these groups was the squamous-cell epithelioma reported to have developed in a varicose ulcer. Tenopyr and Silverman[2] reported four such cases, and Black[5] in 1952 a series of six cases.

In all reported instances the patient's age was over 50 years. The varicose ulcer was of long duration—50 years in one of the patients referred to by Black and 25 years in our own case.

It is interesting to note that Tenopyr and Silverman's four patients were males, whereas Black's series were equally distributed between males and females. Since varicose veins and ulcers are most frequently observed in females, one would ordinarily expect the incidence of malignant degeneration to be proportionately higher in women. Perhaps the answer lies in the knowledge that pain and swelling, exaggerated during pregnancy, and cosmetic reasons prompt women to seek corrective medical attention relatively early.

Malignant degeneration of a varicose ulcer is undoubtedly attributable in part to chronic irritation and infection. In the lower extremity malignant degeneration in burn scars is noted more frequently.

All chronic stasis ulcers which do not respond to acceptable forms of treatment should be suspected of malignant degeneration. Multiple biopsies of the edges and the floor of the ulcer should be carried out. If only the edges of the ulcer prove to be malignant, wide excision and skin graft may suffice. However, if the base of the ulcer reveals malignant changes, amputation well above the site of the ulcer and radical groin lymph node dissection are mandatory. Although such lesions develop slowly, they metastasize and, all too frequently, run the course of a highly malignant tumour.

SUMMARY

1. Malignant degeneration in varicose ulcers is of infrequent occurrence.

2. A case of squamous-cell carcinoma developing in a long-standing varicose ulcer is presented.

3. The occurrence and surgical management of these lesions are discussed.

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HYPOPITUITARISM IN THE AGED

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THE DIFFICULTIES of early diagnosis in cases of hypopituitarism are well stressed by Whittaker and Whitehead.[1] They point out that in their series, nine patients between them paid over 30 visits to different hospitals before the diagnosis was established. With the advent of ACTH and cortisone, many of these patients can be restored to normal health, which makes it all the more important that the condition be recognized and treated as soon as possible.

When the patient is elderly, the diagnosis is even more likely to be missed, as amenorrhœa is of no importance as a feature, and symptoms such as tiredness, weakness, mental inertia and feeling the cold can easily be attributed to old age. Unless the diagnosis is made, the death of the patient may be considered to be due to senility, and the physician is none the wiser.