Hodgkin's Disease of the Uterine Cervix*

J. KNOBEL, F.C.O.G. (S.A.), *Principal Gynaecologist and Senior Lecturer* AND N. C. GAGE, DIP.MID. C.O.G. (S.A.), *Registrar and Assistant Lecturer, Department of Obstetrics and Gynaecology, University of Natal and King Edward VIII Hospital, Durban*

SUMMARY

A case of Hodgkin's disease of the cervix uteri presenting as a gynaecological problem is described. It appears to be only the fourth case of primary Hodgkin's disease of the cervix on record and differs from the other three in that a second primary extrapelvic lesion was present.

A radical method of investigation and management of the disease, in keeping with modern trends, is described.

S. Afr. J. Obstet. Gynaec., **9**, 70 (1971).

Any organ that contains reticulo-endothelial cells, including the uterine cervix, is susceptible to sarcomatous change. Involvement of the respiratory, alimentary, and urinary systems is common but genital involvement is generally a late and infrequent feature.

In their classical treatise on Hodgkin's disease, Jackson and Parker[1] found 3 cases of microscopic involvement of the uterus among 95 cases of Hodgkin's disease coming to necropsy; while Richmond *et al.*[2] reviewed necropsy records of 273 patients with Hodgkin's disease and found that 9·5% of the women had uterine involvement.

However, Hodgkin's disease in a patient presenting with gynaecological symptoms is rare, to the extent that primary Hodgkin's disease of the uterine cervix presenting at a gynaecological clinic has been recorded on only 3 previous occasions.[3-5]

This article reports a fourth case, which differs from the others in that the disease was not confined to the pelvis.

*Date received: 17 September 1971.

CASE REPORT

The patient was a 42-year-old South African Indian. She had 5 children, the youngest being 5 years old. In September 1969 she was seen at the Gynaecological Outpatients' Department complaining of amenorrhoea of 2 months' duration.

Examination showed no obvious cause for her complaint, her uterus being of normal size. Her cervix, however was found to be firm, slightly irregular, bulky, and both anterior and posterior lips were obscured by an obvious erosion which bled on touching. A cervical smear was taken to exclude malignancy.

The cytologist reported that the smear was grossly dysplastic and that carcinoma could not be excluded. The patient was admitted for further investigation.

On closer examination she was found to have a well-defined, painless, mass of lymph nodes in the posterior cervical triangle of the neck on the right side only. The mass was freely mobile and rubbery in consistency. Bilateral shotty nodes were also present in the inguinal region. All the other systems were normal, and neither the liver nor the spleen were palpable.

A slide test for pregnancy was negative; her haemoglobin concentration was 10·1 g/100 ml and the white cell count and blood picture were normal. The sedimentation rate, however, was 49 mm/hour.

A cone biopsy of the cervix was performed because the histology report on a punch biopsy was equivocal.

Histopathological Report

A large area of the cervix was diffusely infiltrated with lymphoid tissue (Fig. 1). For the most part, there was no follicular architecture, the structure being that of a lymphocytic background with small pockets or strands of reticulum cells showing numerous mitoses. Plasma cells and very few eosinophils were seen. The over-all appearances was that of a lymphoma, and though typical Reed-Sternberg cells were not seen, the histological features more closely resembled Hodgkin's disease than any other lymphoma.

A biopsy on the cervical and inguinal lymph nodes was next performed. The cervical node showed the typical features of Hodgkin's disease with loss of architecture, numerous atypical reticulum cells and occasional Reed-Sternberg cells. Fig. 2 shows a part of this lymph node with a field of lymphocytes, atypical reticulum cells showing marked pleomorphism and a multinucleate giant-cell in the left inferior aspect of the field. The inguinal node was normal.

Chest X-ray, intravenous pyelography, and pelvic lymphangiography all failed to show further evidence of the disease.

In consultation with a physician and radiotherapist, the consensus of opinion was that we were dealing with a stage III Hodgkin's disease. This opinion was based on the fact that most authorities today consider the disease to be of unicentric origin.

The patient was treated with megavoltage radiotherapy to the cervical group of lymph nodes on the right; and a course of cyclophosphamide (Endoxan) was administered intravenously at a dose of 1 gram twice weekly to a total of 10 g while monitoring haemopoietic activity.

Since she remained asymptomatic and the prognosis was regarded as poor, further treatment was withheld at this stage.

The patient was followed up at regular intervals and in April 1971 the cervix showed a 'beefy' red erosion which bled easily on touch (Fig. 3). The patient remained asymptomatic but a punch biopsy of the cervix confirmed the persistence of the lymphoma.

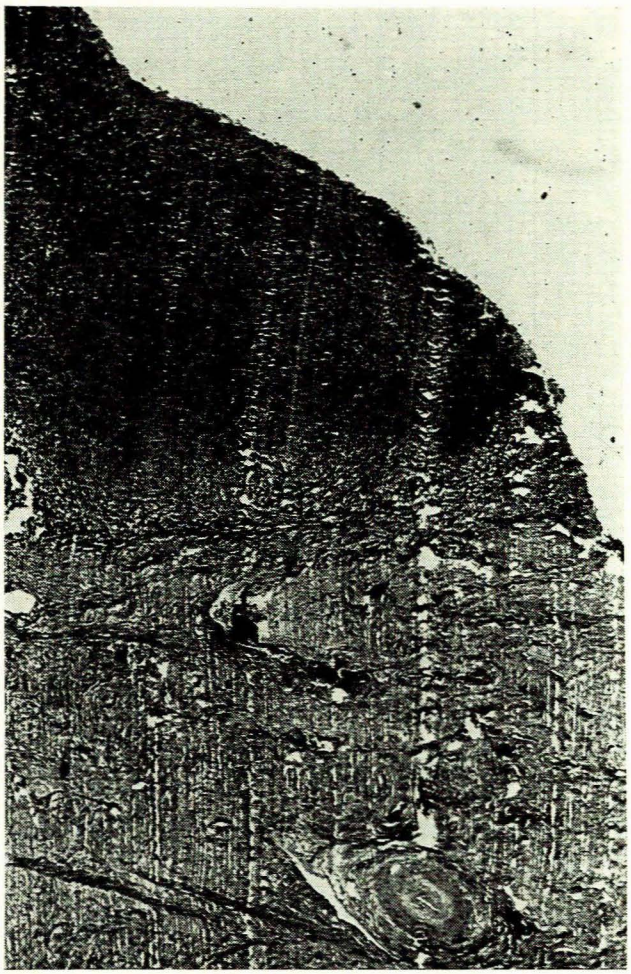

Fig. 1. Low-power magnification of a section of the cervix uteri.

There was still no evidence of further extension of the disease and the situation was reviewed in the light of this and the current trends in management. The physician recommended that the patient should be submitted to laparotomy at which hysterectomy should be performed with simultaneous exploration, splenectomy, liver biopsy, and para-aortic gland biopsy as suggested by Glatstein *et al.*[6]

Accordingly, on 28 April 1971, a total abdominal hysterectomy and bilateral oophorectomy were performed, together with the above recommended procedures, via upper left and lower right paramedian incisions. The post-operative course was uneventful and the patient was discharged on the 15th day, to attend for regular follow-up examinations.

The histology showed no evidence of Hodgkin's disease in serial sections of spleen, liver and a para-aortic lymph node. The hysterectomy specimen showed Hodgkin's

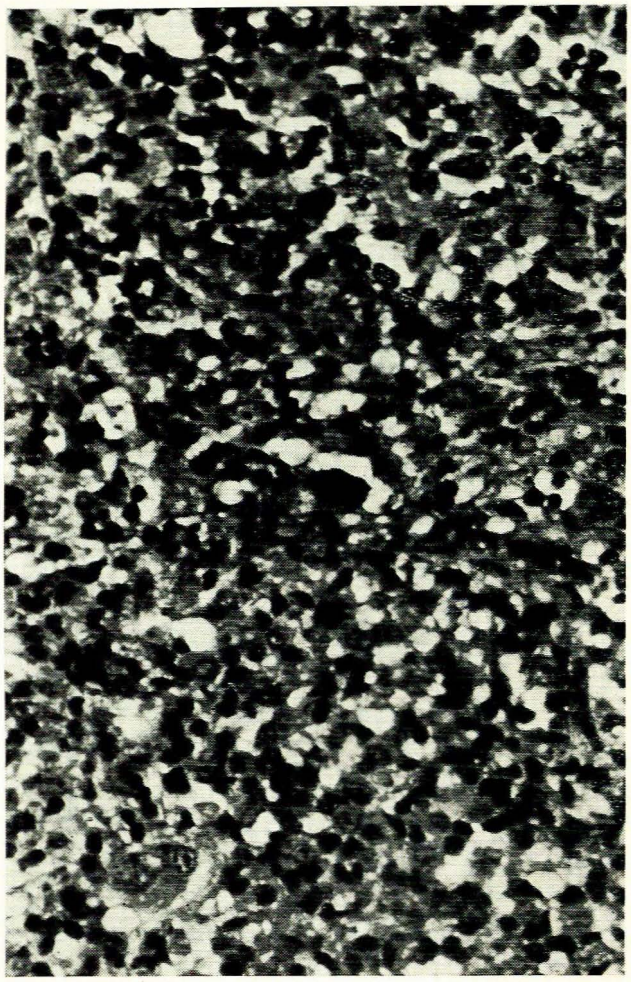

Fig. 2. High-power magnification of a section of a cervical lymph gland.

disease confined to the cervix, but there was no evidence of involvement of endometrium, myometrium, tubes or ovaries.

DISCUSSION

This case is presented to document a rare presentation of Hodgkin's disease and to illustrate some difficulties in managing a case, seemingly of bicentric origin.

Kaplan and co-workers[7] at Stanford feel that this fundamentally neoplastic process is unicentric in origin in most, if not all, instances. They have demonstrated further that spread from the cervical lymph nodes can occur in a retrograde manner to the para-aortic glands and thence to the spleen, liver, and pelvic lymphatics. The presence of disease in these intervening stations was excluded by the somewhat radical surgery described above, and suggested by the same workers as being an important facet in the modern approach to the management of the disease. Our hesitation in resorting to this more radical approach was based on the mistaken belief that we were dealing with 2 widely separated manifestations of a late stage of the disease, when the patient was first assessed, despite the normal chest X-ray, lymphangiogram and renogram at that time.

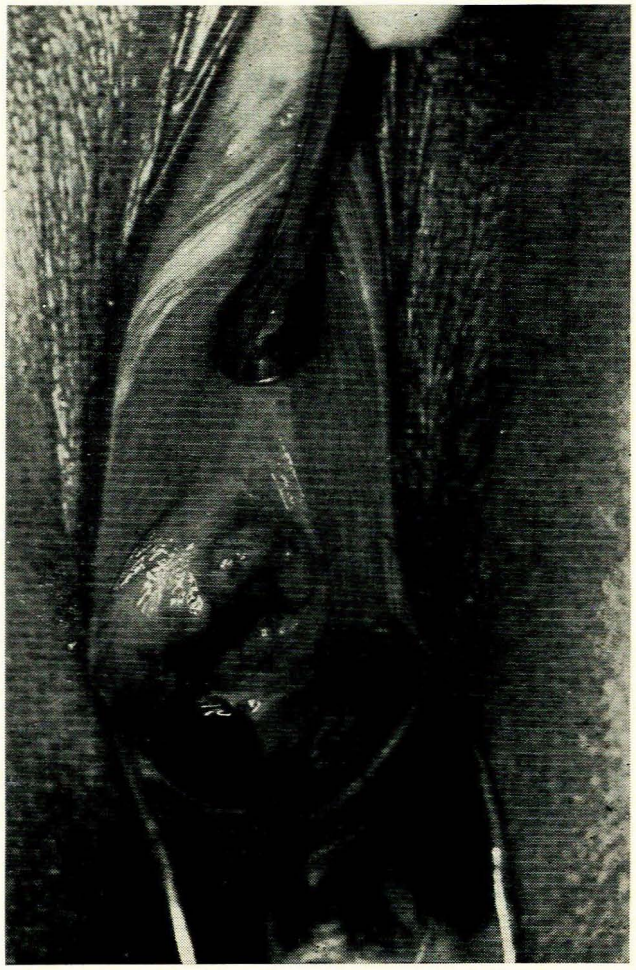

Fig. 3. Naked-eye appearance of the eroded cervix.

After thorough diagnostic evaluation of the extent of the disease at laparotomy, with eradication of the cervical focus by megavoltage radiotherapy and the uterine lesion by surgery, as described, we feel that the chances of permanent cure are excellent in this patient who presented as a gynaecological problem.

We wish to thank Dr H. R. J. Wannenburg, Chief Medical Superintendent of King Edward VIII Hospital, for permission to publish; and Drs D. Pirie, H. W. B. Grieg and A. L. Brown for their able assistance in the investigation and management of this case.

REFERENCES

1. Jackson, H. and Parker, F. (1947): *Hodgkin's Disease and Allied Disorders*. London: Oxford University Press.
2. Richmond, J., Sherman, R. S., Diamond, H. D. and Craver, L. F. (1962): Amer. J. Med., **32**, 184.
3. Retikas, D. G. (1960): Amer. J. Obstet. Gynec., **80**, 1104.
4. Nasiell, M. (1964): Acta cytol. (Philad.), **8**, 16.
5. Anderson, G. G. (1967): Obstet. and Gynec., **29**, 170.
6. Glatstein, E., Guernsey, J. M., Rosenberg, S. A. and Kaplan, H. S. (1969): Cancer (Philad.), **24**, 709.
7. Kaplan, H. S. (1970): *The Harvey Lectures*, p. 215 - 259. New York: Academic Press.