## TUBERCULOSIS OF THE PELVIC LYMPH NODES

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Whereas there appears to be literature in abundance about tuberculous infection of most lymph nodes, by contrast tuberculous infection of the 'pelvic' lymph nodes appears to have received little attention. A description of the following 5 cases that occurred in the Department of Gynaecology of the University of Natal may therefore be worth recording.

CASE REPORTS

Case 1

An Indian woman, R.S., aged 26, gravida-1 (an ectopic pregnancy 2 years before admission), was admitted complain-

ing of lower abdominal pain, dysmenorrhoea and infertility. Menses regular; no period of amenorrhoea, History of excision of cervical nodes 8 years previously. Systematic examination normal. Pelvic examination showed a normal cervix and uterus, but on the right side a hydrosalpinx was palpable. In addition a large mass of nodes about 3 inches in diameter was palpable on the left side wall of the pelvis. The full blood count, Wassermann reaction, urine, and X-ray of chest and of abdomen, were negative. Erythrocyte sedimentation rate (ESR) 27 mm, per hour. Mantoux reaction strongly positive. Curettage revealed tuberculous endometritis on histology, but culture and guinea-pig inoculation were negative for tuberculosis. Extraperitoneal biopsy of the lymph nodes revealed macroscopic and microscopic caseating tuberculosis. The patient was treated for 10 months on antituberculosis drugs without reduction in the size of the mass.

Case 2

An African woman, N.M., aged 29, gravida-2, para-1 (the last pregnancy 8 years before admission), was admitted complaining of lower abdominal pain, infertility and polymenorrhoea for one year. No period of amenorrhoea. Systematic examination negative. Pelvic examination showed normal cervix, uterus and adnexa, but large masses of nodes were palpable on both pelvic side walls, extending to about an inch above the pelvic brim. Urine, full blood count, Wassermann reaction, and X-ray of chest and of abdomen, were negative. ESR 58 mm. per hour. Mantoux reaction strongly positive. The normality of the endometrium removed at curettage was confirmed on histology, culture and guinea-pig inoculation. Extraperitoneal node biopsy revealed caseating tuberculosis of the external iliac group of nodes. Antituberculous treatment was given for 1 month, but the patient failed to return for further therapy.

Case 3

An African woman, T.Z., aged 30, gravida-3, para-3 (last pregnancy 4 months before admission), was admitted complaining of lower abdominal pain. No periods since birth of last child. Systematic examination negative. Pelvic examination showed normal cervix, uterus and adnexa, but large masses of nodes about 3 inches in diameter were palpable on both pelvic side walls. Urine, full blood count, Wassermann reaction, and X-ray of chest and of abdomen, were negative. ESR 48 mm. per hour. Mantoux reaction strongly positive. The normality of the endometrium recovered at curettage was confirmed by histology, culture and guinea-pig inoculation. Extraperitoneal node biopsy revealed caseating tuberculosis of the external iliac group of nodes. Antituberculosis drug therapy was given for 2 weeks, but the patient failed to report back for further treatment.

An African woman, A.Z., aged 38, para-4, gravida-4 (last pregnancy 3 years before admission), was admitted complaining of gradual loss of weight and amenorrhoea for 2 months, with a previously normal menstrual cycle. Systematic examination negative. Pelvic examination showed normal cervix, uterus and adnexa, but large masses of nodes were palpable on both side walls of the pelvis and were just palpable abdominally. Urine, full blood count, Wassermann reaction, and X-ray of chest and of abdomen, were negative. ESR 52 mm. per hour. Mantoux reaction strongly positive. Endometrium removed at curettage proved normal on histology, culture and guinea-pig inoculation, but extraperitoneal node biopsy showed caseating tuberculosis. The patient was treated for 1 month on antituberculosis drug therapy with no improvement in the size of the nodes. She did not return for further treatment.

An African woman, D.N., aged 18, gravida-2, para-1 (last pregnancy 1 year before admission), was admitted when she was 36 weeks pregnant, suffering from cervical and pelvic lymphadenopathy. The pelvic nodes were so large as to prohibit a vaginal delivery. Urine, full blood count, Wassermann reaction, and X-ray of chest, were negative. ESR 47 mm. per hour. Biopsy of cervical lymph nodes revealed caseating tubersules. tuberculosis. Pelvic lymph node biopsy was considered to be redundant, and caesarean section was performed at term. Three months' antituberculosis drug therapy resulted in no change in the size of the lymph nodes, and the patient then absconded.

## DISCUSSION

In these cases the lymph nodes were almost certainly involved during the primary phase of the tuberculous infection, which may have occurred many years previously, because, as Thompson1 has stated, gross tuberculosis occurring in lymph nodes infected other than in the primary phase is extremely rare. The cervical and mesenteric lymph nodes are most commonly affected, presumably because they are associated with a convenient portal of entry for the tubercle bacillus, viz. tonsil and small bowel. By contrast, postmortem studies have shown that pelvic lymph nodes are not commonly involved, probably because of lack of a suitable portal of entry for the organ-

In view of the fact that two of the cases showed tuberculous cervical lymphadenopathy in addition to the pelvic pathology, one can postulate that the infection was probably a generalized disease in the first instance, with its origin in the lung. The pelvic nodes may then have become infected either by direct haematogenous spread, or by the secondary infection of a local organ with subsequent regional node involvement. Lincoln2 and Jones3 favour the former route of infection, but most authors, including Thompson,1 maintain that such a direct bloodspread infection of lymph nodes is rare, and we will therefore confine our attention to the latter consideration and a discussion of the various viscera that may be affected.

Large bowel, rectum, and bladder, are rarely involved and if they had been in the cases here presented one would have expected some measure of local symptoms, which was absent in this series. Gale4 and others have shown that tuberculosis of the sacro-iliac and hip joints may spread to the iliac and obturator nodes, but no osseous involvement could be demonstrated. In one of our cases there was unequivocal evidence that the source of infection was from the endometrial cavity. In the remaining cases the endometrium was normal, although in two of them the symptoms revealed a gynaecological disturbance. It is postulated that primary tuberculosis may spread from the genital tract to the regional lymph nodes, and that in a few cases the primary will continue to flourish, but in others it will die out, leaving only a legacy in the local nodes.

In view of the poor follow-up of these cases, little can be said regarding the treatment, but one case on intensive therapy was followed for nearly a year and showed no improvement at all, and one must lean towards the opinion of Hinden et al.,5 Lester,6 Lester and Jones,7 and Heaf,8 who maintain that once caseation has occurred, surgical excision under antituberculosis drug cover is probably the treatment of choice.

## SUMMARY

Five cases of caseous tuberculous pelvic lymphadenitis are described. It is postulated that the infection may have occurred many years previously at the time of the primary complex and reached the lymph nodes via the genital tract. It is suggested that the use of antituberculosis drugs only may be an inadequate form of therapy.

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## REFERENCES

- Thompson, B. C. (1940): Tubercle (Edinb.), 21, 217.
   Lincoln, E. (1950): Amer. J. Med., 9, 623.
   Jones, B. S. (1951): Brit. Med. J., 1, 1056.
   Gale, G. L. (1953): Canad. Med. Assoc. J., 69, 303.
   Hinden, E., Nardell, S. G. and Anabtawi, S. (1951): Tubercle (Edinb.), 32, 22
- 32, 2.

  6. Lester, C. W. (1951): Amer. Rev. Tuberc., 64, 691.

  7. Lester, C. W. and Jones, J. M. (1956): *Ibid.*, 73, 229.

  8. Heaf, F. R. G. (1957): *Symposium of Tuberculosis*. London: Cassell.