

# ECTOPIC PREGNANCY IN A TUBE INFESTED WITH BILHARZIA

M. G. H. MAYAT, M.B., B.CH., *Department of Gynaecology and Obstetrics, University of Natal*

In his informative book *Bantu Gynaecology* Charlewood<sup>1</sup> states: 'Only three cases have been reported of ectopic pregnancy in association with bilharzial salpingitis (Gibson<sup>2</sup> 1925, Gilbert<sup>3</sup> 1943), and the evidence presented in these cases is far from conclusive.'

The following case is presented because the finding of

an ectopic pregnancy in a tube infested with bilharzia was substantiated by histological examination.

## *Case Report*

An Indian female aged 27 years was admitted to hospital on 22 October 1956. She has 4 children—all were normal pregnancies delivered at term. The last pregnancy was in 1953. Apart from

an occasional delay of 7-9 days, her menses were regular and lasted 5-6 days. Preceding her admission to hospital her menses had been regular and normal. The last menstrual period was from 2-7 October. On 22 October she was well till 4 p.m. when she experienced severe lower abdominal pain, which she described as labour-like. She described something bursting supra-pubically. At 6 p.m. pain prevented her from walking and she experienced difficulty in passing urine. There were no symptoms of pregnancy.

On examination she appeared to be in severe pain which was aggravated by movement. The findings on examination were as follows: Pulse rate 100 per minute. Temperature 98°F. Blood pressure 120/60 mm. Hg. The patient appeared anaemic. The abdomen was tense and distended and the subumbilical portion was very tender. As the patient was obese the fluid thrill could not be relied upon.

On vaginal examination a normal parous cervix was found. The uterus could not be defined owing to acute pain.

A diagnosis of ruptured ectopic pregnancy was made. At operation 2 pints of fresh blood were removed from the peritoneal cavity. A ruptured ectopic pregnancy in the right tube, was found. Small whitish tubercles, the size of pinheads, were scattered over both tubes, and these tubercles appeared to be in the serosal layer. Tuberculosis was suspected and the specimen was sent for histological examination. The histological report reads as follows: 'Part of tube shows haemorrhage and placental villi. A few fibrotic nodules with calcifying bilharzial ova are present in the subserous layer of the tube.' (Figs. 1 and 2.)

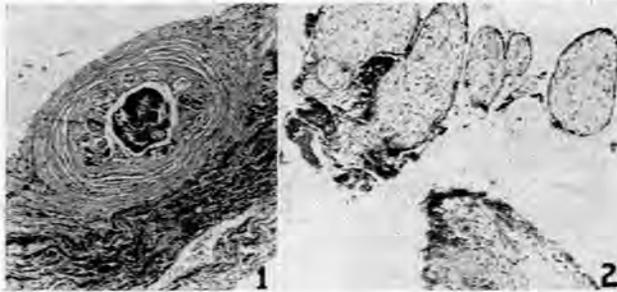


Fig. 1. Fallopian tube showing a solitary bilharzial granuloma.  
Fig. 2. The associated extra-uterine pregnancy in the tube shown in Fig. 1.

#### Distribution of Bilharzia

According to Monnig<sup>1</sup> the *Schistosoma haematobium* is found in the whole of Africa with the exception of two large areas corresponding roughly to the Sahara and Kalahari deserts. The parasite has a terminal-spined, elongated oval egg which is, as a rule, passed in the urine, but sometimes also in the stool. In the Union of South Africa the intermediate host is the *Physopsis africana*. *S. mansoni* occurs in parts of Africa; this parasite has oval, lateral-spined eggs which are passed in the stool and is rarely found in South Africa.

#### Pathology of Bilharzial Salpingitis

The main pathological feature is the deposit of ova in the tube and the formation of tubercles around them. The end result is fibrosis. The bilharzial tubercles are the size of sago-grains and are white in colour. There is some difference between the lesions caused by *S. haematobium* and *S. mansoni* as regards the tube. Charlewood and associates<sup>5</sup> stated that in their series the tubal lesions were found almost exclusively in the wall of the tube without affecting the mucosa. This produced thickening of the wall and some narrowing of the lumen without occlusion.

Thus fertilization of an ovum is not prevented, but progression of the inseminated ovum may be impeded resulting in an ectopic pregnancy.

In Arean's<sup>6</sup> cases of *S. mansoni* infestation, by contrast, most severe lesions were found in the mucosa and to a lesser extent in the wall. The mucosa in some cases was so extensively replaced by granulomas that no traces of the mucosal linings were left. This led to segmental occlusion of the lumen and dilatation of the distal segments which contained inspissated material made of cellular debris, cholesterol crystals and round-cell infiltration.

#### Symptoms and Signs of Bilharzial Salpingitis

The history usually is that of pains in the lower abdomen in a woman who has bathed in infected rivers. In the less severe cases the pain is indistinguishable from that of ordinary salpingitis. The pains, although of long duration and varying intensity, may commence suddenly and simulate an acute abdomen. Menses are usually unaffected. On pelvic examination it is unusual to find departure from the normal because in the Union of South Africa we are mostly dealing with a *S. haematobium* infection. Occasionally a thickened tube may be identified. Gelfand<sup>7,8</sup> stresses the difficulty in making a correct diagnosis. A history of having lived in an infected area, the finding of ova in the urine or stool, eosinophilia, cystoscopy, bilharzial complement-fixation test and rectal biopsy help in the diagnosis. It is helpful to remember that a vigorous massage of the bladder during a pelvic examination may liberate ova in the urine which otherwise may be free of ova. It is surprising that whilst the *S. haematobium* affects the mucosa of the bladder and rectum, the mucous membrane of the tube escapes.

#### Treatment

A course of sodium antimony gluconate (Triostam), containing 30% trivalent antimony—225 mg. dissolved in 3.5 c.c. water and injected slowly I.V. daily for 6 days—should be given. This is used in preference to antimony tartrate since side-effects are less frequent. Vomiting and paroxysms of coughing do not occur.

It is important to submit all operative specimens, which appear suspicious, for histological examination. Tubes which have tubercles scattered on their serosal surfaces should not be removed. Gelfand<sup>7</sup> reports a case of a female aged 24 who had a grossly distorted bilharzial tube removed. At operation the other tube was found to have a few tubercles on the serous surface, but otherwise appeared normal. A course of antimony was prescribed. Two years later she was pregnant. The antimony had prevented loss of function of the remaining tube.

#### SUMMARY

A case of ectopic pregnancy in a bilharzial-infested tube is presented. The pathology and diagnosis are discussed with a review of the literature.

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#### REFERENCES

1. Charlewood, G. P. (1956): *Bantu Gynaecology*, 1st ed., p. 43. Johannesburg: Witwatersrand University Press.
2. Gibson, R. W. B. (1925): *S. Afr. Med. J.*, 21, 44.
3. Gilbert, B. (1943): *J. Obstet. Gynaec. Brit. Emp.*, 50, 317.
4. Monnig, H. O. (1934): *S. Afr. Med. J.*, 8, 319.
5. Charlewood, G. P., Shippel, S. and Renton, H. (1949): *J. Obstet. Gynaec. Brit. Emp.*, 56, 367.
6. Arean, V. M. (1956): *Amer. J. Obstet. Gynec.*, 72, 1039.
7. Gelfand, M. (1941): *S. Afr. Med. J.*, 15, 69.
8. *Idem* (1949): *Ibid.*, 23, 255.