ASPERGILLOSIS OF THE GENITAL TRACT

(Report of a Case)

by

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Mycotic infections of the genital tract are rare. Most of the reported cases are due to actinomyces. Cases of aspergillosis of the genital tract have been reported in both sexes by Castellani (Quoted by Conant *et al* 1971). Finegold *et al* (1959) have reported a case of aspergillus infection of the uterus and internal organs including the brain, in a woman who had a septic abortion. The case reported here is of interest because of its rarity. This case also illustrates the well recognised association of aspergillosis and tuberculosis.

CASE REPORT:

Mrs. K., 24 years old, an agricultural labourer, was admitted on 28-4-1971, with complaints of pain in the abdomen and swelling of the lower abdomen since one year. She was having amenorrhoea since her last childbirth four years back. The abdominal swelling was slowly increasing in size.

Her first pregnancy ended at the eight month in premature labour, the second was a full term normal delivery at home. There was no history suggestive of postpartum infection, any chronic illness or prolonged treatment with antibiotics or immunosuppressive drugs.

Her fenstrual cycles were regular till her last delivery. Since then, for the last four years, she was having amenorroea. She stopped lactating one year after her delivery.

The positive finding on physical examination was a mass in the right iliac fossa, 3 x 4 cm. in size, soft and cystic, with well defined margins. The mass had restricted mobility. Vaginal examination showed the uterus normal in size and felt separate from the mass which was anterior and to the right. Routine laboratory investigations showed no significant pathology. A provisional diagnosis of ovarian cyst was made.

Laparotomy revealed a thick walled cystic mass on the right side fith adhesions all around. After the adhesions were separated, the cystic mass was found to be a pyosalpinx. The ovary on the same side was closely adherent to the pyosalpinx and had a small abscess which burst during dissection. The left tube and ovary were apparently normal. Uterus was found to be normal in size. The right tubo-ovarian mass was removed. The peritoneum was mopped clean and the abdomen was closed in layers.

A dilatation and curettage was done to exclude any uterine pathology accounting for the long period of amenorroea.

Postoperatively the patient was given

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Received for publication on 10-8-72.

tetracycline 250 mg. 6 hourly for 5 days. She was discharged two weeks later, apparently cured.

Histopathological examisation of the removed tubo-ovarian mass showed a fibrous cystic wall, with large number of thin separate hyphae and clumps of small round spores attached to the cyst wall (Figure). There was minimal inflammatory reaction. A diagnosis of aspergillus infection of the tube and ovary was made. Tuberculous infection could not be demonstrated in the mass. The endofetrium removed by curettage showed evidence of tuberculosis on histopathological examination. There was no evidence of aspergillus infection in the endometrium.

Discussion

Aspergillosis is caused by different species of Aspergillus, the commonly isolated pathogenic species being A. fumigatus. The infection is characterisnecrotising lesions which can involve any ed by granulomatus, inflammatory or tissue in the body. The severity of the infection varies from an incidental (opportunistic) relationship to a fulminating fatal infection.

Human beings get the infection usually by inhalation of spores of the fungus which grows abundantly on dry or decaying vegetation. Hence, farmers and gardeners are prone to get the infection, as in this patient, who is an agricultural labourer. Though heavy exposure to fungus spores can produce primary respiratory disease (Finegold, *loc. cit.*) infection is more often due to an abnormal susceptibility of the individual as a result of debilitating diseases like tuberculosis or malignancy. Prolonged therapy with antibiotics or steroids also will predispose to aspergillus infection.

From the primary focus in the lung, the disease can spread to other organs by haematogenous dissemination. Though respiratory tract is the common primary site of infection, other regions of the body like the external ear, paranasal sinuses, conjunctiva and orbit have been reported as primary sites (Green *et al*, 1969). Superficial trauma seems to be necessary for initiating this type of infection.

In the case reported, no other site of aspergillus infection could be demonstrated clinically or radiologically. The finding of tuberculosis of the endometrium explains the secondary amenorrhoea in this patient and it also supports the view that tuberculous infection predisposes to aspergillosis.

It is difficult to diagnose aspergillosis of the genital tract clinically, except that it can be considered as one of the differential diagnoses of chronic tubo-ovarian masses. Laboratory diagnosis is by examination of pus from the abscess cavity microscopically for the presence of hyphal fragments and typical conidiophores. Culture of the pus and culture and histopathology of the tissue removed are other diagnostic procedures.

Drug therapy for aspergillosis has not been found effective. Iodides, hydroxystilbamidine, amphoterecin B, are some of the drugs which have been tried. Nystatin is found effective in destroying aspergillus in superficial infections, but is too toxic for parenteral administration. Wherever possible, surgical removal of the infected tissue offers the best result.

Summary

A case of aspergillus infection of the tube and ovary is reported and its association with tuberculosis of the genital tract noted. The source of infection, pathology and management are discussed.

Acknowledgement

We express our thanks to Dr. M. Thankam, Director of Obstetrics &

Gynaecology and Superintendent of Medical College Hospital, Calicut, for guidance and for permission to use hospital records.

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See Fig. on Art Paper IX

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