Acquired rectovaginal fistula

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Abstract

Nine girls presented with an acquired rectovaginal fistula shortly after birth. All mothers tested were seropositive for HIV. It is suggested that an acquired rectovaginal fistula is an early manifestation of HIV infection in girls.

(*Arch Dis Child* 1994; 71: 165-166)

Infection is associated with changes in the presentation and behaviour of certain common diseases in Africa.¹ It is also implicated in the development of several new pathologies. This report describes nine cases of acquired rectovaginal fistula in girls whose mothers when tested were seropositive for HIV. To our knowledge this is a previously unreported association.

Patients and methods

Over a six month period from June to December 1993, nine girls presented to the department of paediatrics, Queen Elizabeth Central Hospital, Blantyre with a recent onset of the passage of faeces through the vagina. Their mother's HIV status was assessed by a double enzyme linked immunosorbent assay (ELISA) using the Welcozyme test in all but one infant (case 6), who died before consent could be given. Unfortunately CD4 and CD8 lymphocyte counts could not be performed due to lack of facilities. All infants fulfilled the World Health Organisation clinical criteria for aids related complex or AIDS.²

Results

The age range for the infants at diagnosis was between 2 and 6 months (table). All infants had been born with a normal anus, perineum, and bowel function. Examination revealed almost identical anterior fistulas which extended laterally from the upper anal canal to the distal vagina (figure).

Examination of infant showing fistula.

In all eight of the nine cases tested, their mothers were found to be seropositive on ELISA testing. One father had died of AIDS in the previous year (case 4).

On admission all children had radiographs of the chest if the symptoms and signs indicated infection. Six of the nine children had radiographic abnormalities suggestive of tuberculosis or lymphocytic interstitial pneumonia. Two infants died rapidly from respiratory infections shortly after admission to the hospital. Three children remain well on treatment for tuberculosis. Three children have been lost to follow up and one infant has only recently been diagnosed, but remains well.

Discussion

In adults there is a well established association between HIV infection and a high incidence of infection of the rectovaginal region.¹ In children this has not previously been documented.³⁻⁵ Our series of nine cases of acquired rectovaginal fistula, presenting within a six month period, is unusual. An acquired rectovaginal fistula is a rare complication in children, even in those who are severely malnourished and debilitated.

We suggest that the most likely cause for the development of a rectovaginal fistula in our infants is some form of low grade but localised

Patient characteristics at diagnosis. All infants had an anterior rectovaginal fistula

Case No	Age (months)	Weight on admission (kg)	Duration of symptoms (days)	Mother ELISA reactive	Chest radiograph	Course
1	2	5	9	+	Bilateral infiltrates, LIP?	Remains well, but fistula still present
2	6	5.4	10	+	Pulmonary TB	Failure to thrive; episodes of fever; receiving TB treatment
3	8	8.5	14	+	Bilateral infiltrates, LIP?	Lost to follow up
4	6	6.5	7	+	Not performed	Died of acute pneumonia; father died of AIDS
5	6	6.5	60	+	Bilateral infiltrates, LIP?	Lost to follow up
6	4	4.5	4	Not performed	Acute pneumonia	Died of anaemia and acute pneumonia
7	3	5.7	3	+	Miliary TB	Receiving TB treatment
8	4	6	2	+	Not performed	Lost to follow up
9	2.5	4	30	+	Normal	Remains well, but failure to thrive

LIP=lymphocytic interstitial pneumonitis; TB=tuberculosis.

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Accepted 23 March 1994

perianal sepsis. It is of interest that no disorder similar to that which we have described in girls is seen in infant boys.

The age of onset, associated infections, clinical presentations, and the HIV seropositivity of the mothers all suggest congenital or perinatal acquired HIV infection in these children. We believe that the appearance of an acquired rectovaginal fistula in infant girls is an early manifestation of HIV infection.

Extended follow up should reveal the natural progression of the disease. Our oldest surviving child is still alive six months after the initial diagnosis and the fistula shows no sign of

spontaneous closure. The question remains as to whether early surgical intervention could be of benefit in these children.

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- 4 Rogers MF. AIDS in children: a review of the clinical, epidemiologic and public health aspects. *Pediatr Infect Dis* 1985; 4: 230-6.
- 5 Rubinstein A. Pediatric AIDS. *Curr Probl Pediatr* 1986; 16: 361-409.