

# Appendiceal-umbilical fistula in neonate

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## Summary

*In this paper, we report a congenital appendiceal-umbilical fistula case, which is an unusual anomaly.*

Congenital anomalies of appendix are rare. The most common anomalies are agenesis and duplication. Other anomalies include diverticulum formation and heterotopic mucosa (1,2); but congenital appendiceal-umbilical fistula is an unusual anomaly and up to 1986 no case was reported. In 1986, Shija (7) reported the first case. We report here a case of congenital appendiceal-umbilical fistula.

## Case Report

An 11-day-old girl with intestinal-umbilical fistula referred to our clinic in May 1988. She was in good general health and had no birth trauma. The fistula was said to be present at birth. The external lesion consisted of colium uteri-like organ of 2-3 cm in the middle of which there was an orifice and which was covered with a red mucosal surface merged with a surrounding umbilical skin. The provisional diagnosis was vitello-intestinal fistula. Fistulography performed with barium showed a fistulous tract between umbilicus and appendix (Fig 1). The patient was prepared for surgery.

At operation the following findings were observed. There was a 1 cm-umbilical defect. The external organ was in continuity with the 1/3 proximal of appendix through this umbilical defect (Fig 2). The cecum was mobile. No other congenital abnormalities were present.

Appendectomy and removal of the umbilical lesion were performed. The histopathological study showed that the fistulous tract and the external organ consisted of colonic wall which covered by colonic mucosa with ulceration and mononuclear inflammation in some places. The postoperative period was uneventful.

## Disussion

This unusual congenital anomaly have not been reported in the literature up to 1986 (7). In 1986, Shija

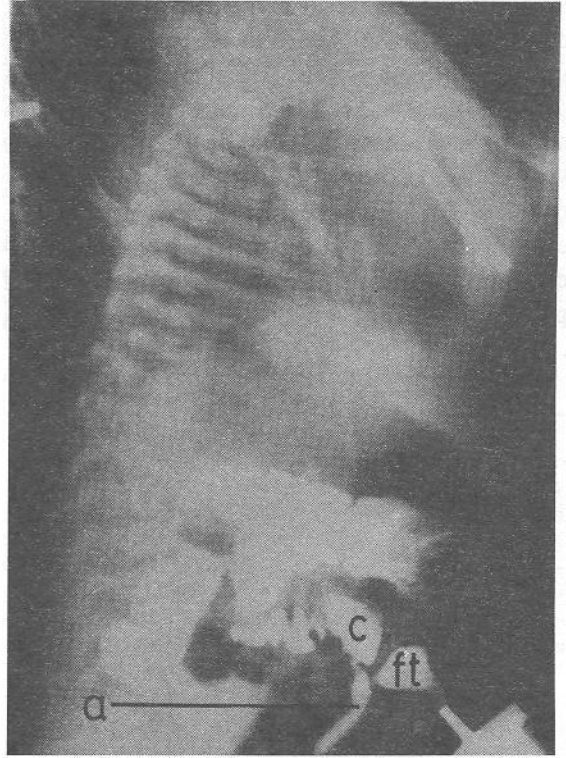


Fig 1. Fistulography in lateral position (c:cecum, a:appendix, ft: fistulous tract).

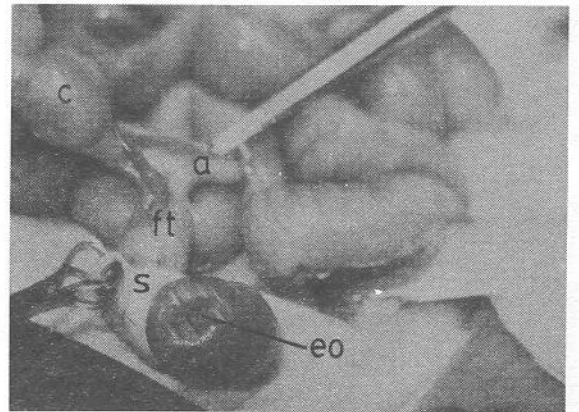
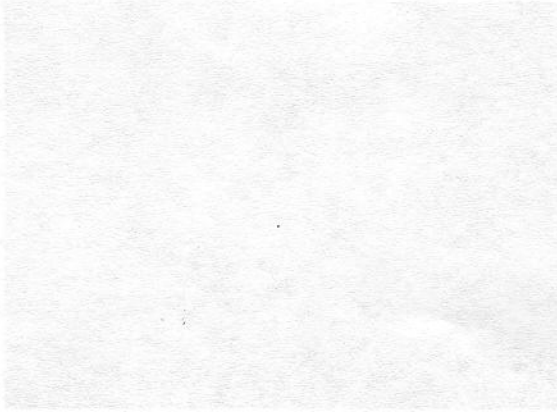
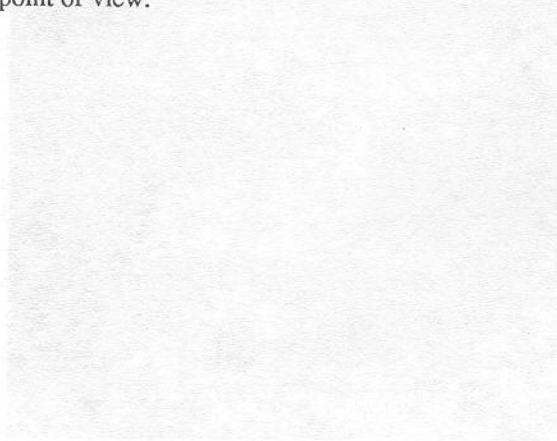


Fig 2. Peroperative appearance of the lesions (c:cecum, a:appendix, ft: fistulous tract, s:skin, eo: external organ).

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(7) reported the first congenital appendiceal-umbilical fistula with appendiceal intussusception and herniation through an umbilical defect.

It is known that the embryological development of appendix occurs during the second and third periods of intestinal rotation, and the umbilical wall during the eighth to tenth weeks of the fetal life (3,5,6). The developmental pathologies in this period result in varied abnormalities. The pathological explanation of some of them, such as vitello-intestinal abnormalities and congenital umbilical hernia, is well known. Also, the pathology of acquired colo-umbilical fistulas may easily be explained (4). But external fistulisation of appendix through an umbilical defect is difficult to explain from embryological point of view.



### Referance

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