At left frontal craniectomy, 60 ml of fluid extradural hematoma with a few clots was evacuated. No dural tear was identified. The post-operative course was uneventful and the patient made gradual but full recovery.

Discussion

An acute EDH is classically described as having a uniformly high attenuation value (hyperdense) on the CT -scan(3). Very rarely an EDH may be isodense(4-7). The isodensity of an acute EDH is thought to be due to low hemoglobin(9-11 g/dl) and hematocrit(28-33), admixture of blood with cerebrospinal fluid, inhibition of clot formation or rapid clot dissolution(4-7). Low hemoglobin and hematocrit are probably the main contributory factors as demonstrated by attenuation measurement of blood components on computed tomography(7). This was further confirmed by New and Aronow(8), who demonstrated a linear correlation between the hematocrit of whole blood and CT attenuation values. In the anemic patient with a hemoglobin between 9 and 11 g/dl, the attenuation of extravasated blood may not differ from the normal brain.

In the presence of normal coagulation profile, hemoglobin above 11 g/dl and hematocrit of more than 33, and isodense EDH indicating liquid blood as seen in case 1 could possibly be explained on the basis of rapid clot dissolution. However, a small dural tear which could escape detection or heal spontaneously cannot be ruled out. In our second case, hemoglobin was below 11 g/dl and the hematocrit was below 33. This could possibly explain the isodensity of EDH.

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Duplicate Perineal Anus A Rare Anorectal Malformation

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True duplication of the rectum and anus is a rare anomaly. Three patterns of

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anatomical arrangement have been described–two separate perineal ani opening externally; two ani, but one or both terminating in a fistula to the genitourinary tract; and, one external anus and one imperforate in the pelvis(1). We report an unusual case of duplicate perineal anus wherein two ani lay in line in the natal cleft, one behind the other. The condition appears distinct from the apparently similar conditions reported in the literature. We seek to highlight this rare anorectal malformation.

Case Report

A 3-month-old female presented as a thriving infant with two anal openings present since birth. There was a history of passage of feces through both the openings. There were no urinary complaints and the baby was otherwise normal.

Examination of the perineum revealed two separate anal openings, both in the midline, one behind the other (*Fig. 1*). Digital rectal examination done through the normal anterior anus revealed a small opening in the posterior wall of the rectum about 1 inch from the anal verge. The posterior anal opening was narrow and would admit 10 Fr catheter. Each anal orifice issued feces and each was continent. Examination of the external genitalia showed single clitoris, paired labia and single vaginal orifice. No abnormal opening was discernible in the vestibule. There were no associated anomalies of the other organ systems.

The contrast radiograph with thin barium suspension introduced into each anus showed anal duplication communicating with the single rectum (*Fig. 2*). There was no duplication either of the rectum or colon on barium enema study. Abdominal ultrasound excluded associated abnormality of the kidneys.

Since the double ani were aesthetically displeasing, a simple excision of the septum intervening between the two ani was done. Post-operative recovery was uneventful. Histological examination of the septum revealed anorectal mucosa with mucus secreting columnar epithelium on both surfaces with intervening smooth muscle. The child was seen at 3 months follow-up passing regular stools from the single anus.

Discussion

Increasing awareness of the varieties of anorectal malformations have brought into focus a number of 'Rare Malformations' which are reported in the literature from time to time. Our case, however, does not fit in entirely with any of the reported malformations(2).

'Double termination of the alimentary tract' refers to ano/recto vestibular fistulas with a normal anorectum(3). The anovestibular variety has also been referred to as 'perineal canal' by Stephens and Smit(4). Our case had both the openings in the natal cleft without any communication with the vestibule.

Congenital fistula-in-ano in childhood has been described in the literature(5). Acquired perineal abscesses may fistulize and became epithelialized with time. However, irrespective of the etiology, patients with fistula-in-ano have inflamed fibrous tracts adherent to the surrounding tissues(6). The excised septum in our case showed no signs of inflammation, fibrosis or granulations. On the other hand, normal anorectal mucosa was found lining the excised septum.

Very rarely, rectal duplications may present as a perianal fistula(7,8), sometimes posterior to the anus(7). A characteristic finding is a cone shaped dimple in

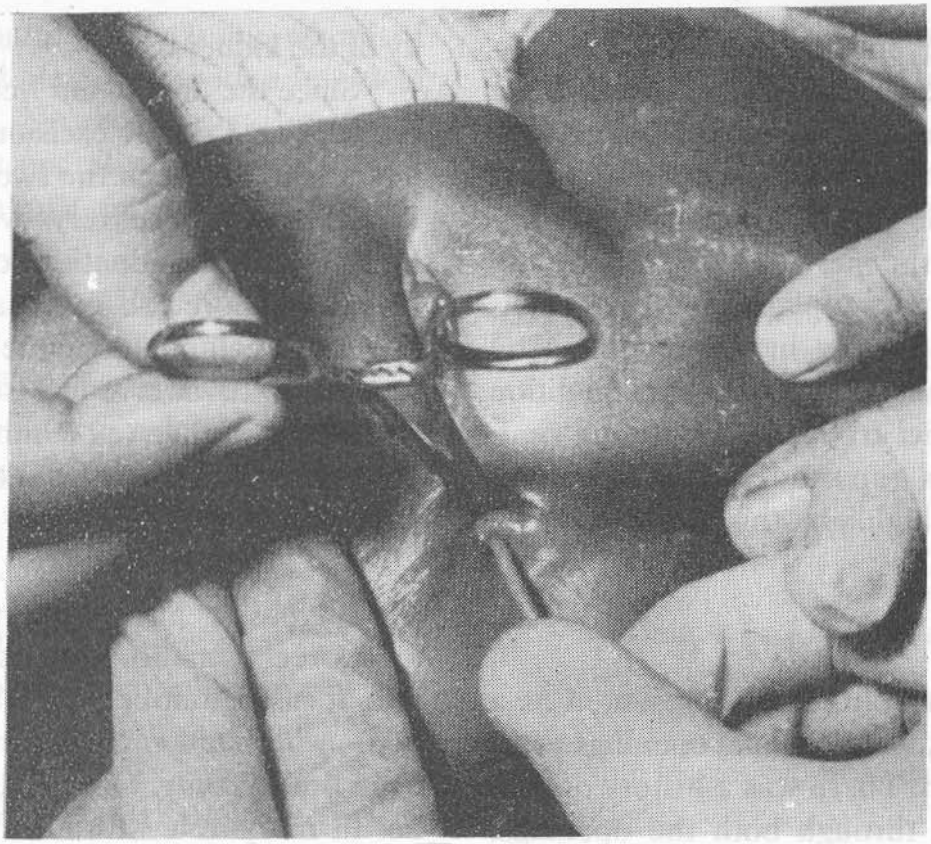

Fig 1. Clinical photograph of the baby with duplicate perineal anus (tip of the artery forceps in anterior anal opening and the catheter in the posterior opening) both in the midline. Note the single vulva.

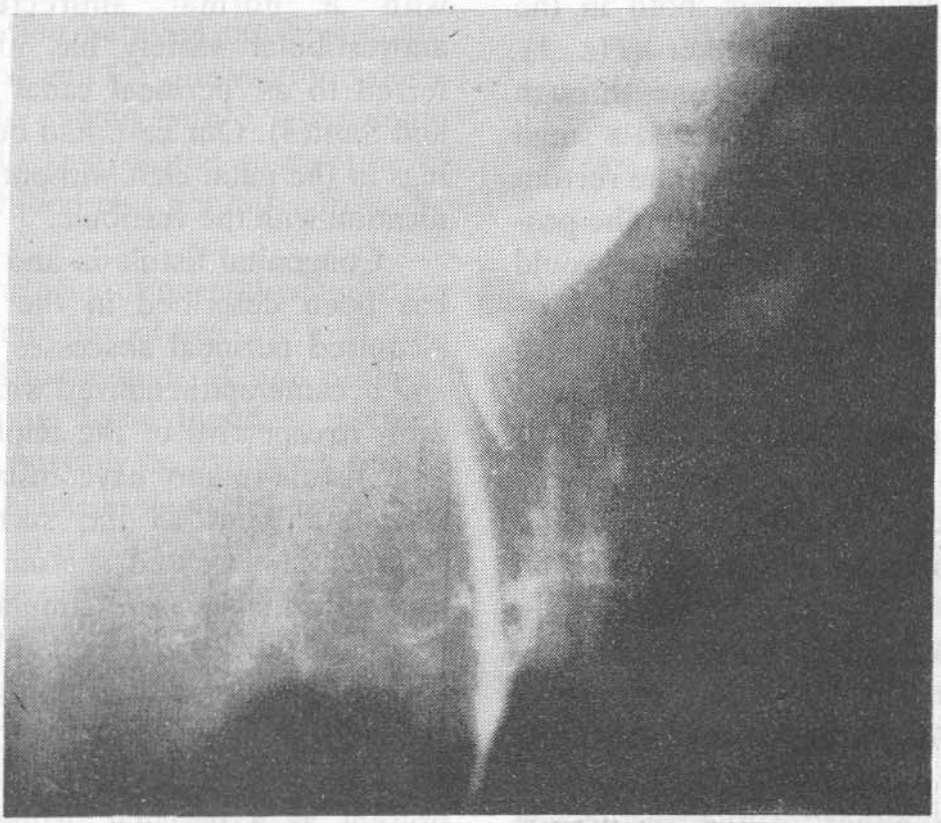

Fig. 2. X-ray pelvis (lateral view) with the barium introduced through both ani showing communication with the single rectum. The catheter is retained in situ in one of the openings. There has been some spillage of the eye.

the posterior midline. A digital rectal examination with radiological demonstration of a cyst in the retrorectal region confirms the diagnosis. A digital rectal examination in our case revealed no cyst, but the opening of the 'abnormal' posterior anal canal in the posterior midline just below the levator sling. Injection of radio-opaque contrast showed both tracts to communicate with a single rectum and no proximal duplication of the large bowel.

The smaller size of the posterior anal verge coupled with its somewhat ectopic location led us to assume it to be 'abnormal'. The tract however confirmed to the three proposed characteristics of alimentary tract duplication(7).

Smith has recorded 12 cases of double perineal ani(1). In most of their patients the ani lay on either side of the midline, in line with their corresponding duplicate genitalia. They all had variable duplication of the colon and genitourinary structures. The illustrated case of Abrami and Dennison(1) had both ani in the midline one behind the other in the natal cleft and resembles our case, but in their case only one anus communicated with the rectum and the baby had multiple congenital anomalies.

We are not sure of the terminology to be used to describe this anomaly, 'double termination of the alimentary tract', 'congenital anal fistula with a normal anus' and perianal fistulas as a result of rectal duplication are conditions distinct from ours. The term 'duplicate perineal anus' is suggested till something more specific is forthcoming.

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