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CASE REPORT

CONGENITAL ABSENCE OF ASCENDING COLON AND CAECUM: A CASE REPORT

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ABSTRACT: INTRODUCTION: A 45 year male patient presented to emergency ward with pain abdomen from 2 days, vomiting from 1 day. On examination diffuse abdominal tenderness was noted with no guarding and no rigidity. USG showed dilated bowel loops with subhepatic appendicitis. So patient was taken up for surgery thinking in favour of appendicular pathology. In the laparotomy to our surprise there was no appendix present and there was distorted anatomy. On careful examination it was noted that there was absent caecum and ascending colon with a rudimentary appendix. Ileum was ending directly in the transverse colon in the sub hepatic region. Search was made to find the pathology and an adhesion band was noted between the bowels with small bowel dilatation and bowel was viable. Band was removed and abdomen was closed with drains. Post op recovery was good and was discharged on 10th POD.

DISCUSSION: The commonest congenital abnormality of the caecum is having a mesentery and a freely movable caecum. It may have a common mesentery with the whole of the small intestine. This gives rise to caecal volvulus.

A rarer condition is for the caecum to be arrested under the liver and for there to be no ascending colon.

A still more rare condition in which the caecum and ascending colon had entirely failed to develop, the small intestine joining on directly to the right end of the transverse colon. The ileum for about four inches before its junction was considerably dilated and was apparently functioning as a caecum. The ileocecal valve was entirely absent, but curiously enough a rudimentary appendix existed.

Case details: A 45 year male patient presented to emergency ward with Pain abdomen from 2 days, vomiting from 1 day. No other significance noted from history

ON EXAMINATION: Mild abdominal distension present Diffuse abdominal tenderness noted on palpation No guarding & rigidity.

Investigations: X ray erect abdomen: air in the bowel loops noted

USG: Dilated bowel loops with? subhepatic appendicitis.

PROVISIONAL DIAGNOSIS: Lower midline incision was planned suspecting appendicular pathology.

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Intra operative findings:

1. There was no appendix in right iliac fossa and there was distorted anatomy.
   On careful examination it was noted that Caecum & Ascending colon were absent with a rudimentary appendix.

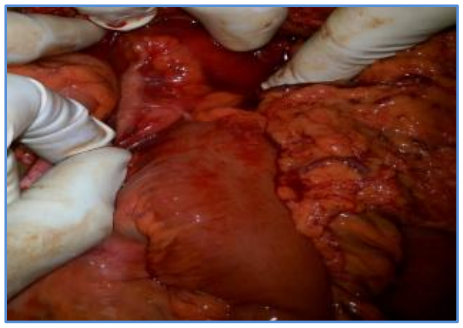

Fig. 1: Rudimentary Appendix

2. Ileum was ending directly to the right of transverse colon in the sub hepatic region.

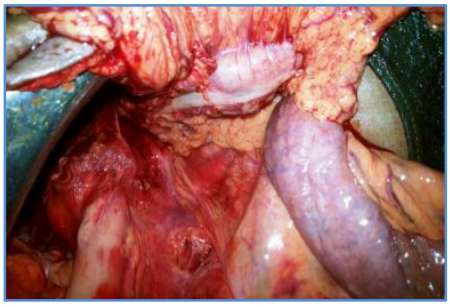

Fig. 2: Ileum ending to the right of transverse colon in subhepatic region

3. Several adhesions were noted between the small bowels with dilated loops.

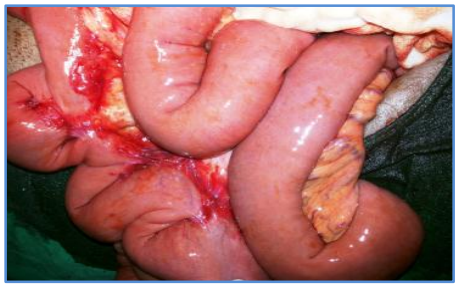

Fig. 3: Adhesions

Bowel was finding viable.

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PROCEDURE: Adhesiolysis was performed. Wash was given and abdomen was closed with drains.

POST-OPERATIVE PERIOD: Patient recovered well. He was discharged on 7th POD.

DISCUSSION:

DEVELOPMENT OF GIT[1]: In the process of gut development the colon begins to be differentiated from the rest of the alimentary canal about the 6th week of intra-uterine life. The caecum first appears as a lateral protrusion of the alimentary tube. This protrusion forms just beyond the vitelline duct and gradually increases in size except at its blind extremity, which remains narrow and becomes the vermiform appendix.

As the alimentary canal increases in length it forms a loop, the lower limb of which forms the colon, which thus comes to be placed transversely in the peritoneal cavity lying in front of the commencement of the small intestine.

In the third and fourth month of intra-uterine life the caecum lies at about the centre of the abdomen, while the remainder of the colon lies as a curved tube in the left hypochondriac and left iliac regions, attached by a mesentery to the front of the spine.

As the alimentary canal increases in length and the loop enlarges, the caecum and upper part of the colon are carried upward and to the left, and then over to the right, so that the caecum comes to lie under the liver in the right hypochondriac region.

Later the caecum passes downward toward the right iliac fossa. In the eighth month foetus the caecum is just below the right iliac crest, and the colon forms the typical inverted U as in the adults.

The causes of the descent of the caecum into the right iliac fossa are somewhat uncertain, but it has been pointed out by Mr. Lockwood that in the eighth-month fetus there is a band of peritoneum passing from the right testis to the caecum close to the termination of the ileum, and he has suggested it as probable that the caecum is carried down into the right iliac fossa by the descent of the testicle. Lockwood found that in the female foetus there is a similar relationship between the right ovary and the caecum.

The commonest congenital abnormality of the caecum is having a mesentery and a freely movable caecum. It may have a common mesentery with the whole of the small intestine. This gives rise to caecal volvulus[1].

A rarer condition is for the caecum to be arrested under the liver and for there to be no ascending colon.

A still more rare condition in which the caecum and ascending colon had entirely failed to develop, the small intestine joining on directly to the right end of the transverse colon. The ileum for about four inches before its junction was considerably dilated and was apparently functioning as a caecum. The ileocecal valve was entirely absent, but curiously enough a rudimentary appendix [2]existed.

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Similar case reports:

1. A case recorded by Prof. Elliott Smith[3] in Jour. Of Anatomy and Physiology, v, 58. The patient was a woman, aged twenty-five, in whom the ileum passed insensibly into the ascending colon without there being any caecum or any trace of an ileocaecal valve. There was no splenic or hepatic angle to the colon, and the whole large bowel was provided with a long mesentery. A rudimentary appendix was present.
2. A case is mentioned by Professor Turner in Edinburgh Medical Journal[4], 1863, p. 110), in which there was congenital absence of the caecum.
3. A case recorded by Lockwood[5] Brit. Med. Jour., 1882, vol. ii, p. 574 a male aged twenty-five, in whom the colon had not completed its descent into the iliac fossa and the caecum was situated opposite the crest of the ileum.
4. A case recorded by H. D. Rolleston[6] in Transactions Path. Soc., I890, p. 130 records a case of congenital mal development of the caecum. The terminal portion of the ileum had no mesentery and the caecum was of the primitive type and had not descended, but had remained in front of the right kidney.

CONCLUSION: Anamolies in the gut development with absent caecum and ascending colon are rare. It may be asymptomatic and may be noted as a incidental finding as in our case.

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