

A CASE OF PERSISTENT DESCENDING MESOCOLON

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SUMMARY

During dissection of the abdomen the descending colon was found to be displaced medially with a persistent mesocolon still present. In the lateral recess created by this abnormal position were found coils of ileum and jejunum. The ascending colon although not displaced also contained a persistent mesocolon, although somewhat shorter in length. Throughout its length the descending colon was only 2.5 cm. in width, however, upon pathological examination was found to be normal.

Key words: Descending Colon, Mesocolon, Persistent, Fixation.

INTRODUCTION

Positional anomalies of the descending colon are rarely cited in the literature and are fewer in number than those of the ascending colon. Usually by the end of the fifth month in the embryo the descending colon is fused against the dorsal wall by obliteration of the primitive dorsal mesocolon. However, when the descending mesocolon persists greater mobility and malposition of the descending colon more medially with parts of the small intestine located in the resulting lateral recess is seen (1).

This positional shift can give rise to clinical symptoms such as episodes of crampy abdominal pain of differing severity (2). It is thought that the pain is caused by partial temporary obstruction of the loops of small intestine in the recess created by the abnormal, more medial positioning of the colon. Surgery is indicated in those cases where the condition is diagnosed by x-ray in conjunction with persistent intermittent abdominal pain (1).

MATERIAL AND METHOD

The abdominal contents of a Turkish male cadaver were exposed. During routine dissection, examination of the abdominal tract, the peritoneal attachments and the length of the ascending, transverse, descending and sigmoid colon were noted. Additionally, any

positional changes of the small intestine were also searched for.

Due to the fact that the whole length of the descending colon and part of the sigmoid colon were of very narrow diameter sections of both were investigated pathologically.

RESULTS

The ascending colon was seen to be more mobile than usual and a small persistent mesocolon was seen to be continuous with the mesentery of the small intestine. However, the mesocolon of the descending colon was very large and parts of the jejunum and ileum were seen to be located laterally to it, in a recess created by the oblique more medial position of the colon (Figure 1).

The first 15 cm of the sigmoid colon were seen to be of normal diameter however, the remainder was very narrow as was the whole of the descending colon. These portions were found to be pathologically normal. For dimensions of the portions of the large intestine see table I.

DISCUSSION

Congenital positional anomalies of the colon can be either those of rotation or those of fixation. In this study we report a congenital anomaly of fixation due to the fact that the splenic flexure was held in its normal position by a posterior retention band (2).

Although positional anomalies of the right colon due to a persistent mesocolon are relatively common, those of the left colon are infrequently seen(1). Treves (1885) reported in Grays Anatomy, noted in a series of 100 subjects, 52% had neither a persistent ascending or descending or descending mesocolon, 14% had both, 12% an ascending and 22% a persistent descending mesocolon (3). Although, this study contradicts the former statement, literature of late reflects a persistent right ascending mesocolon to be more common than that of the left colon which are cited with great interest within articles. (1,4).



Figure 1. Exposed abdominal contents of a male cadaver showing persistent descending mesocolon and a deviated descending colon.

Although in our case the descending colon is only mildly displaced to the midline lying on the psoas next to the left lateral border of the vertebral column. Other cases report it swinging acutely to the right and being fixed to the region of the ileocaecal junction (4).

The right colon however, was in its normal position and its very small persistent mesocolon obviously had lent to very little freedom of movement. If the mesocolon on the right had been large, the excessive mobility could have resulted in volvulus of the ascending colon or caecum (1).

On either the left or the right side, the mesocolon can result in a paraduodenal hernia. The entrapment of small intestine behind the descending colon results in a characteristic x-ray appearance. The loops of small intestine form a characteristic straight line on the lateral margin of the abdominal x- ray. This picture can be confused with that of intersigmoid hernia (1).

The case reported here is another to be added to the occurrence of persistent descending mesocolon. This

may be a more common occurrence than originally thought, giving rise to such symptoms as severe recurrent crampy abdominal pains, which with the characteristic x-ray, may warrant corrective surgery.

TABLE I: Dimensions of the portions of the large Intestine

	Length (cm).	Width (cm).
Caecum	8	8
Ascending Colon	7	3.5
Transverse Colon	43	4.5
Descending Colon	17	1.5
Sigmoid Colon	35	2-4

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