

Position of Vermiform Appendix in western Maharashtra

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Abstract

Introduction: Vermiform appendix is an organ with immunological function in the abdominal cavity which is variable in position and length. It is important in different disease processes, such as appendicitis, carcinoma and diverticulitis. Appendicitis is the most important clinical condition. Appropriate anatomical knowledge about vermiform appendix is important for surgeons, pathologists and other physicians for proper diagnosis and management of appendicitis and carcinoma.

Study design: Descriptive type of study.

Materials and methods: Hundred (100) human postmortem vermiform appendix, age ranging from 0 to 65 years. Samples were observed in situ in the dead bodies within 24 hours of death.

Results: Retrocaecal position was highest (65%) followed by pelvic (31.7%) and post ileal (3.3%). Subcaecal and pre ileal varieties were not found.

Conclusion: This study is very useful for surgeons in appendectomy.

Keywords: Position, vermiform appendix, appendicitis

Introduction

The vermiform appendix is an organ of variable position. Histological differentiation of vermiform appendix showed that it is a specialized organ¹. There is no definite rule about the position of the vermiform appendix, but it is thought that the position of the vermiform appendix is closely related to the development of caecum². Some investigators claim that the retrocaecal and retro colic positions are the commonest. Vermiform appendix performs some functions related to gastrointestinal tract, the main function being immunological. It has also been stated that

vermiform appendix acts like tonsil. As tonsil guards the upper alimentary tract from bacteria, the vermiform appendix also guards the small intestine from bacteria present in the large intestine³.

According to Wakeley⁴, the positions of the vermiform appendix are as follows:

- (a) retrocaecal and retro colic passes retroperitoneal behind the caecum and ascending colon, and is the commonest type (60%)
- (b) pelvic tip of appendix passes downwards and medially, crosses right pelvic brim, and is the second commonest type (30%)

(c) Splenic or ileal type tip of the appendix passes upwards and medially in front or behind the terminal part of the ileal (pre or post ileal) (12%), (d) subcaecal and paracolic lies below caecum and tip ascends by the side of the ascending colon (2%)

(d) Mid-inguinal very rare type and tip of the appendix is directed vertically downwards.

Materials and methods

The present study was performed on hundred (100) human vermiform appendixes of government medical college, Miraj.

Parameter

Position of the vermiform appendix.

Procedure of the study

Determination of the position of the vermiform appendix.

The study was done in situ in the cadavers, before the organ was displaced by manipulation and dissection from the right iliac fossa. The abdomen was opened by a long midline incision and the flaps were reflected to give a good view of the abdominal cavity along with its contents. The anterior caecal taenia coli act as the best guide for the vermiform appendix. Although the relation of the base of the appendix to the caecum is constant, the position of the vermiform appendix was studied in relation to the caecum, the terminal parts of ileum and the direction of the tip of the appendix. Accordingly, the position of the vermiform appendices was noted.

Table I: Incidence of position of vermiform appendix (n=100).

Position	Number (n)	Percentage (%)
Retrocaecal	39	65.0
Pelvic	19	31.7
Post ileal	2	3.3
Pre ileal	0	0.0
Subcaecal	0	0.0

Results

Table I the incidence of position of vermiform appendix. The percentages of position of vermiform appendix were 65% retrocaecal, 31.7% pelvic and 3.3% post ileal.

Pre ileal and subcaecal varieties were not found. The present study shows retrocaecal, pelvic and post ileal variety of vermiform appendix.

Discussion

In the present study, the retrocaecal position was highest (65%) followed by pelvic (31.7%) and post ileal (3.3%). But the subcaecal and pre ileal varieties were not found.

The findings of the present study were similar to the findings by Wakeley, Maisel⁵, Solanke⁶, Gladstone and Wakeley⁸ where retrocaecal position was higher than the pelvic variety.

Conclusion

In the present study, we obtained the following frequencies for appendix positions: retrocecal: 65%, pelvic 31.7 l: 24.4%, post- ileal: 3.3%, pre-ileal: 0.0%,. This study is very useful for surgeons in appendectomy.

References

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