

Semey State Medical University  
Chair of normal and topographical anatomy

# IWS

**Topic:** The variants of the position of the vermiform  
appendices.

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# Plan:

## I Introduction:

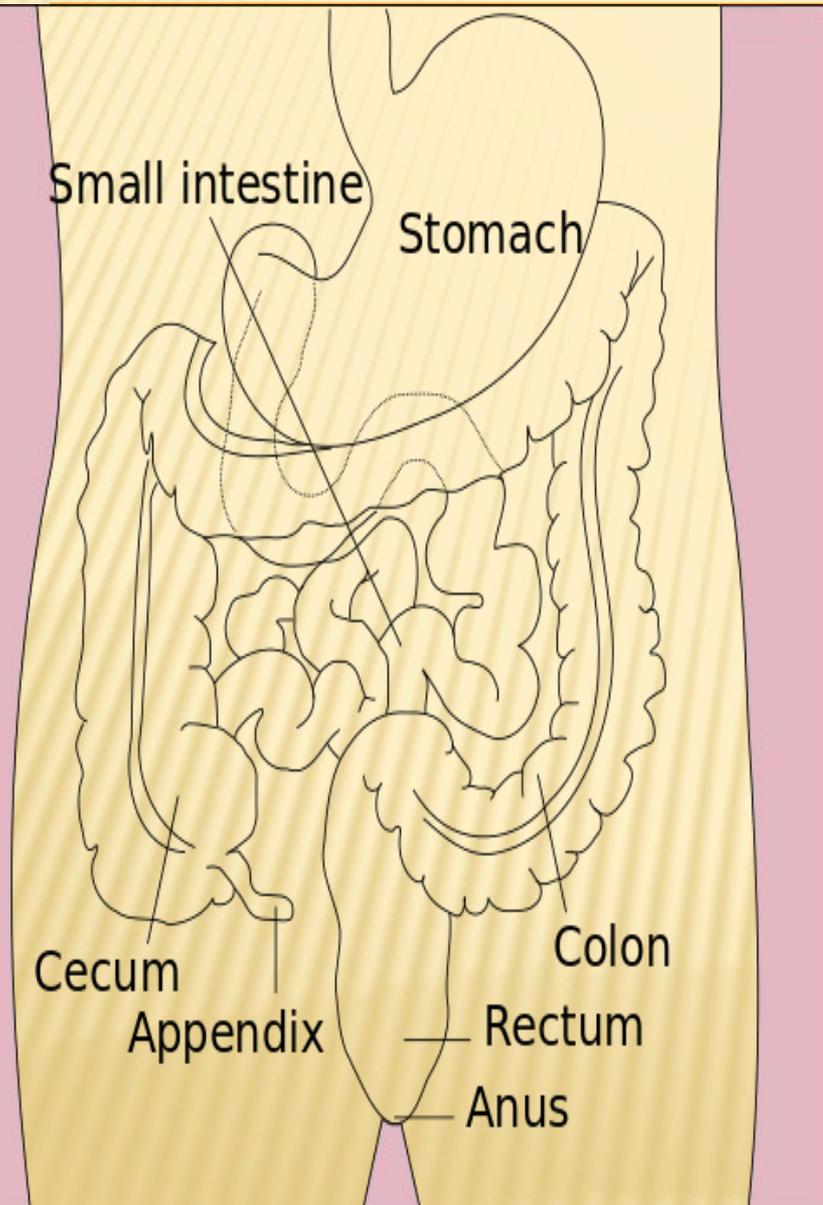
- What is appendix

## II Main part:

- Functions of the appendix
- Variants of the location of the appendix

## III Conclusion

## IV List of literature

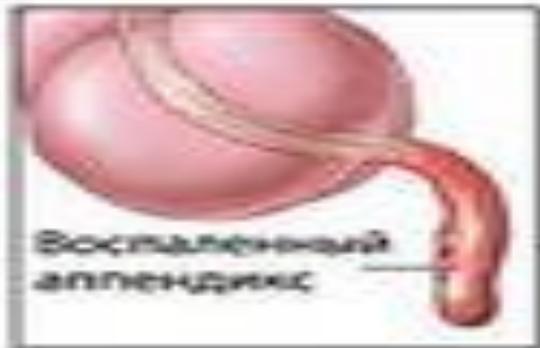


- The **appendix** (or **vermiform appendix**; also **cecal** [or **caecal**] **appendix**; also **vermix**) is a blind-ended tube connected to the cecum, from which it develops embryologically. The cecum is a pouchlike structure of the colon, located at the junction of the small and the large intestines.
- The term "vermiform" comes from Latin and means "worm-shaped".

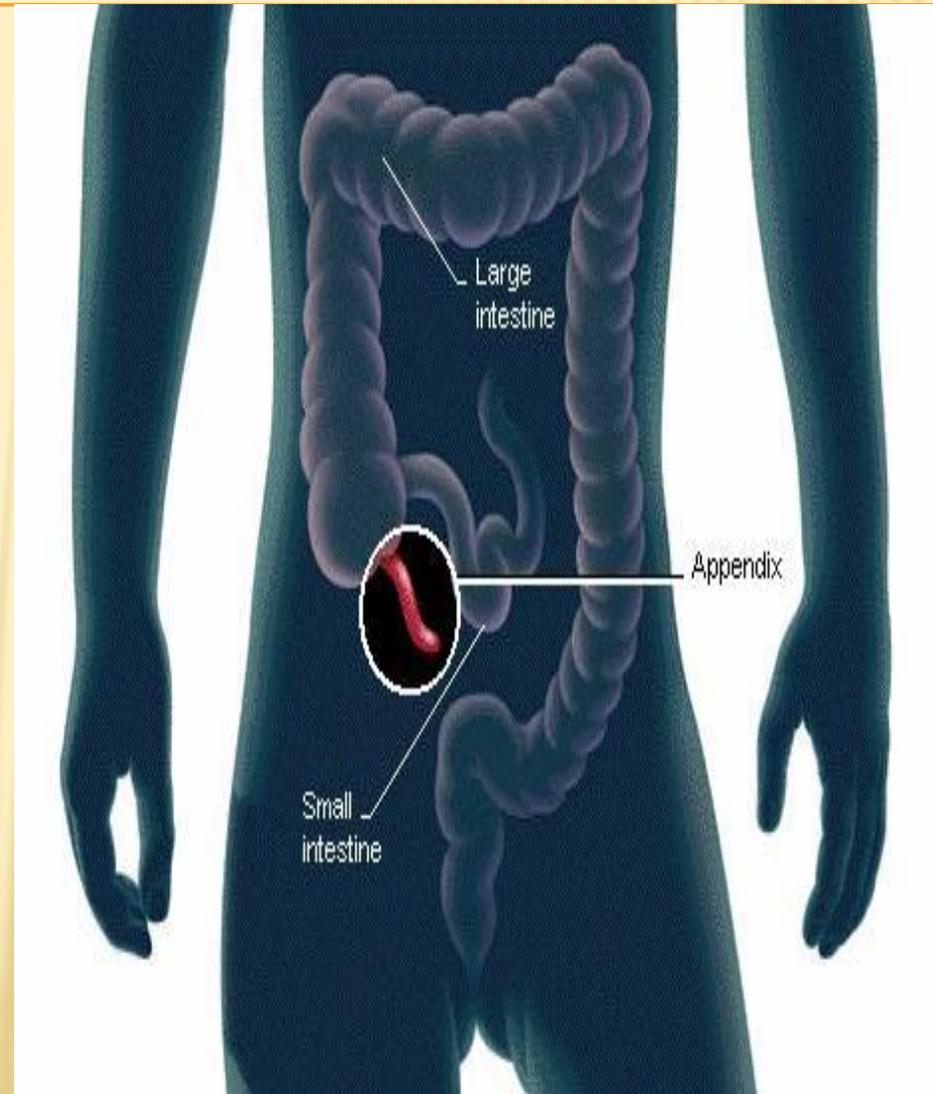
- The human's appendix averages 11 cm in length but can range from 2 to 20 cm. The diameter of the appendix is usually between 7 and 8 mm. The opening of the appendix is occasionally guarded by the valve of Gerlach, named after German anatomist Joseph von Gerlach. This valve consists of a semicircular fold of mucous membrane. The appendix is usually located in the right lower quadrant of the abdomen, near the right hip bone. Its position within the abdomen corresponds to a point on the surface known as McBurney's point.

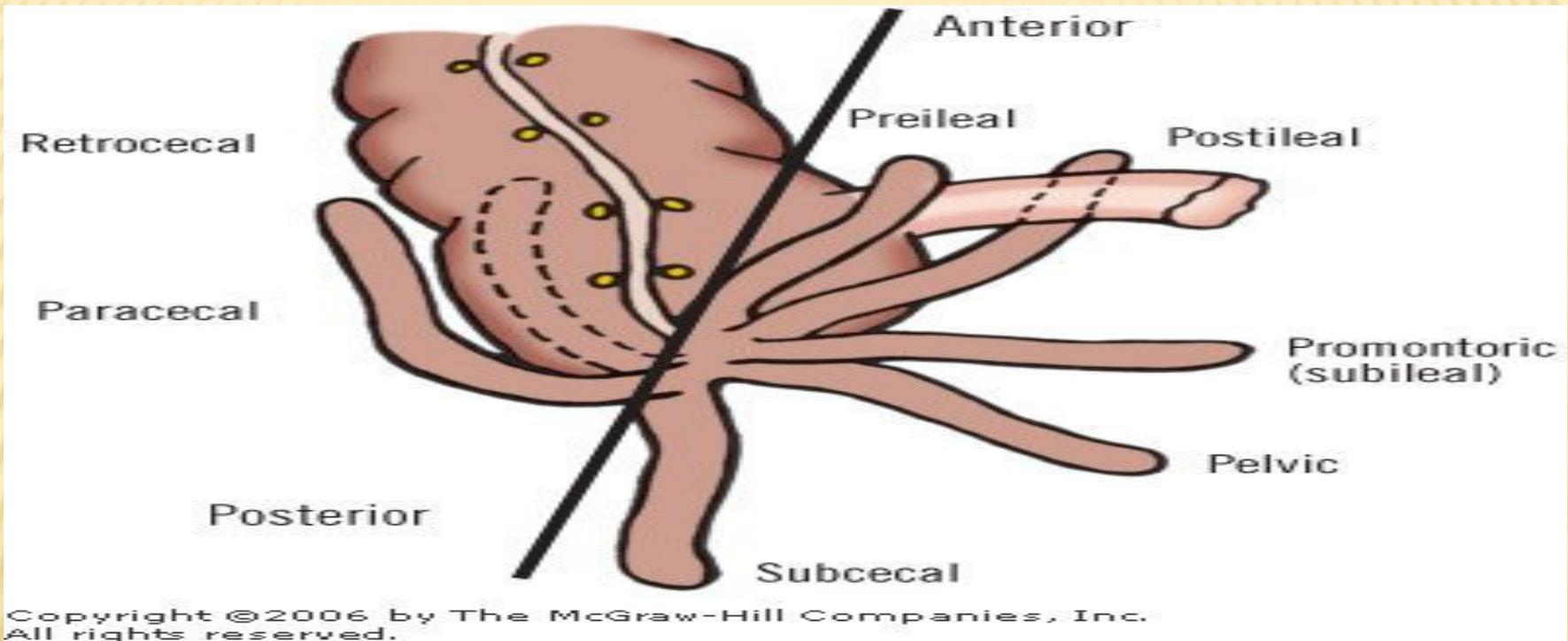


- Found that the appendix located on the boundary between the thin and thick intestines, during the evolution of mammals arose independently in different species about 32 times. these data may indicate that the appendix - not a useless vestige, a body that plays an important role in body.

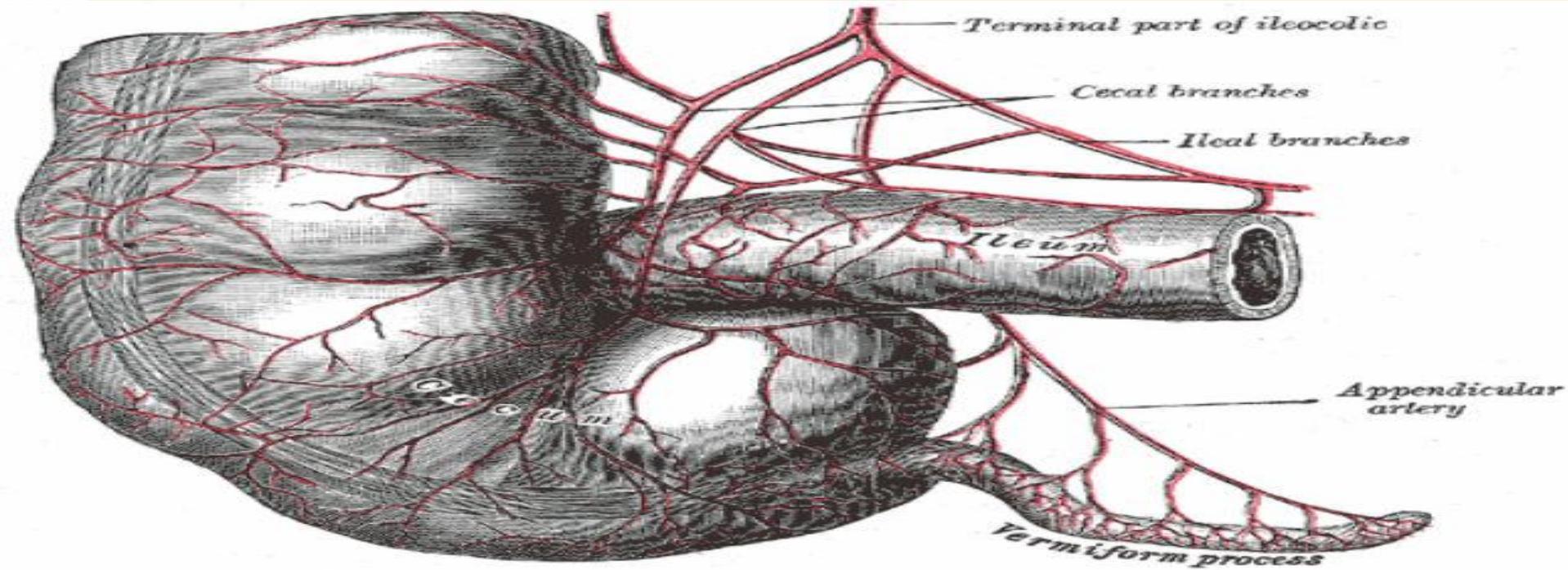


- Function of the appendix: digestive (reservoir for the bacteria involved in the digestion certain types of food), endocrine, immune. Furthermore, the appendix is used as material for reconstructive surgery of the genitourinary system studied the location of the appendix and its role.





- **Variants of the location of the appendix:** 1 - typical; 2 - medial; 3 - pelvic; 4 – Ascending - along the right side of the channel; 5 - obstructive; 6 - retrocecal; 7 - retrperitoneal; 8 -the left side.

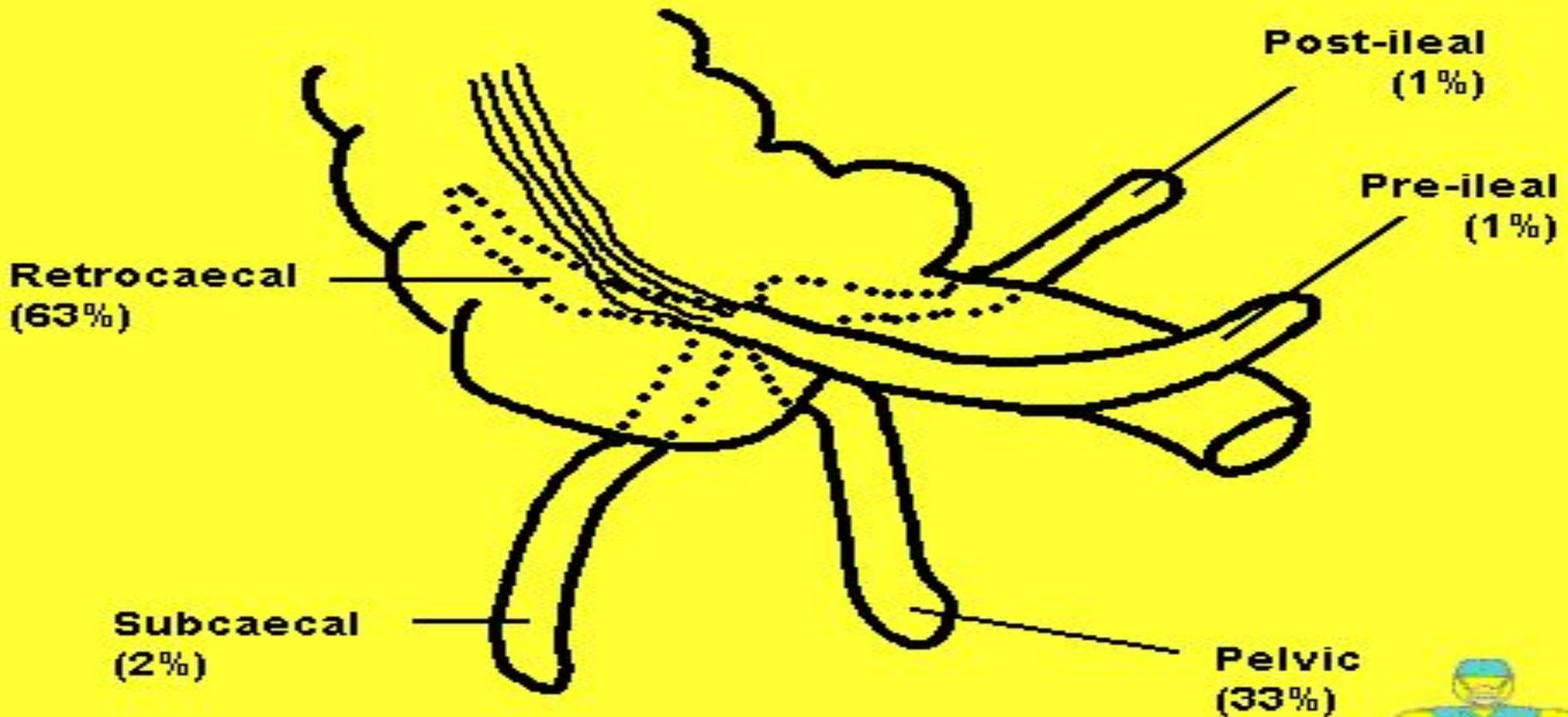


- Most often the appendix is behind and below the end of the ileum (the typical location) within the right iliac fossa;

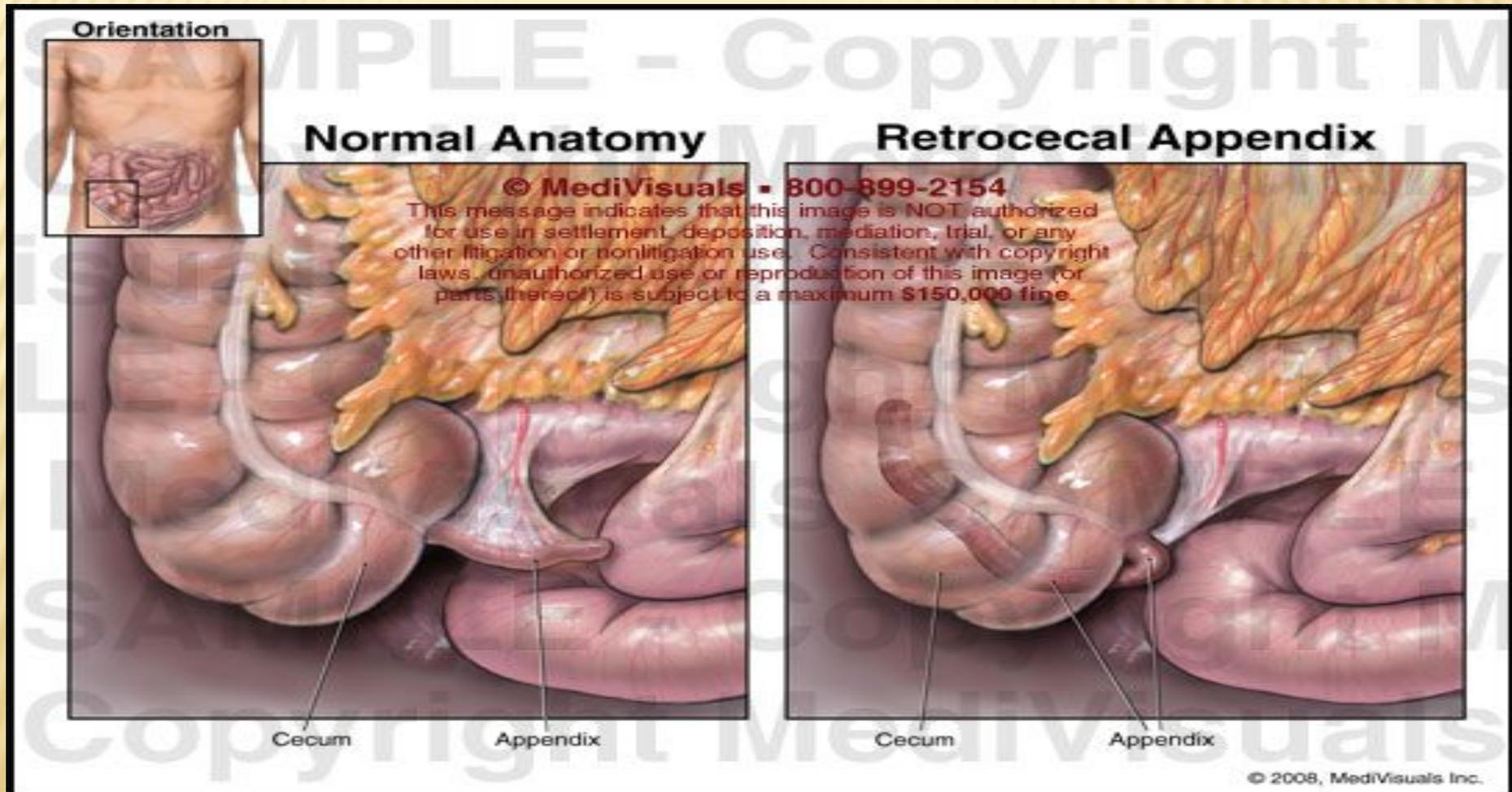


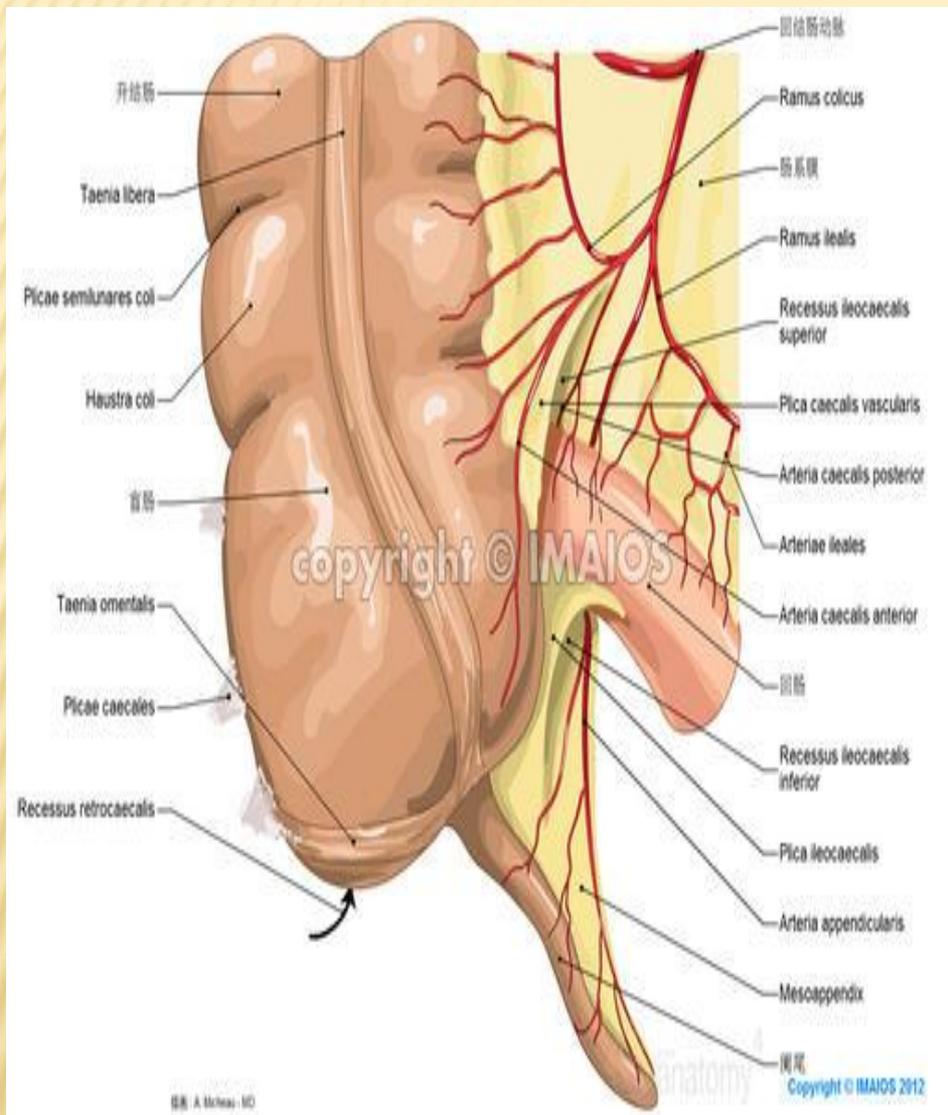
- Medial location – appendix is shifted to the midline and is located close to the top or at the root of the mesentery of the small intestine that causes features of the clinical picture of the medial appendicitis

Pelvic location - at anomalies of the cecum it is located in the pelvis



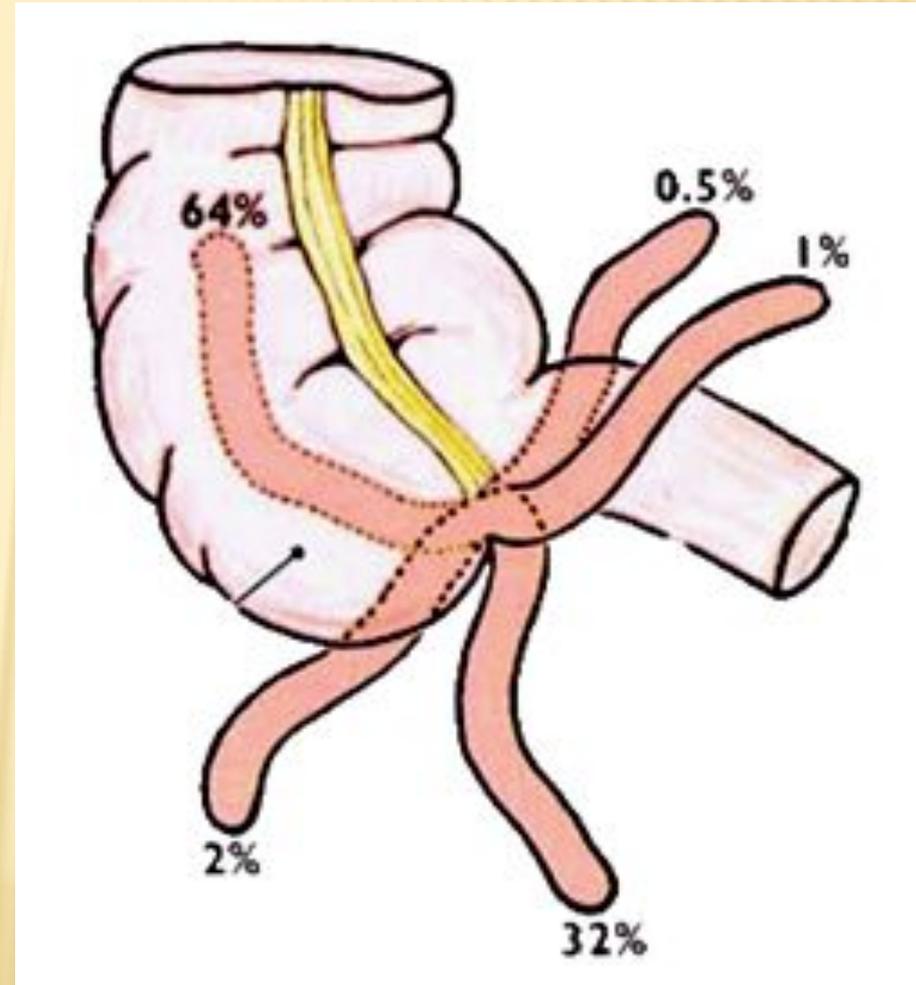
- Retrocecal position - located behind the dome of the cecum





- In cases where the cecum is covered by peritoneum mesoperitoneally, process may be in the retroperitoneal space - a retroperitoneal position.

- At anomalies of the cecum it is located under the liver - subhepatic location



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**The appendix is the only organ in the body which is said to have no anatomy.** When compared to the hour hand of a clock, the positions would be:

12 o clock: **Retrocolic or retrocecal** (behind the cecum or colon)

2 o clock: **Splenic** (upwards and to the left – Preileal and Postileal)

3 o clock: **Promonteric** (horizontally to the left pointing the sacral promontory)

4 o clock: **Pelvic** (descend into the pelvis)

6 o clock: **Subcecal** (below the cecum pointing towards inguinal canal)

11 o clcok: **Paracolic** (upwards and to the right)

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Most common position of appendix (75% of cases): Retrocecal

Second most common position of appendix (20% of cases): Subcecal

If the appendix is very long, it may actually extend behind the ascending colon and abut against the right kidney or the duodenum; in these cases its distal portion lies extraperitoneally.

## Clinical importance of appendicular location...

- Exceptions exist in the classic presentation due to anatomic variability of the appendix
- Appendix can be retrocaecal causing the pain to localize to the right flank
- In pregnancy, the appendix can be shifted and patients can present with RUQ (Right upper quadrant) pain
- In some males, retroileal appendicitis can irritate the ureter and cause testicular pain
- Pelvic appendix may irritate the bladder or rectum causing suprapubic pain, pain with urination, or feeling the need to defecate
- Multiple anatomic variations explain the difficulty in diagnosing appendicitis

Pain exacerbation of appendicitis gets worse with rotation medially and laterally in case of appendix lying against obturator internis muscle.

# Conclusion

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Appendix — this reliable storage for bacteria to which intestines contents thanks to what the body can be peculiar "farm" where useful microorganisms breed usually don't get. It had especially important role in ancient times, but with development of understanding of the principles of work of a human body people with a remote appendix can compensate substantially it to function, using the means normalizing intestinal microflora (especially after a course of treatment slabovsasyvayemy antibiotics). Also, how some researchers [who believe?], because of significant increase in population density the modern person can receive bacteria and from other people.

The appendix plays a saving role for preservation of microflora, it is a colibacillus incubator. Exactly here the original microflora of a thick gut remains. The appendix — is the body which is carrying out the same function for intestines, as almonds for lungs. It contains conglomerates of lymphoid follicles and functions as part of uniform functional system of mukozalny immunity.

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# literature:

Wiki.com

<http://medchrome.com/>  
[.wikipedia.org/wiki](http://wikipedia.org/wiki)