-form the demilunes in the submandibular gland secrete the lysozyme, whose main activity is to hydrolyze the walls of certain bacteria

-esophagus:

Begins at lower border of cricoids cartilage (at level of body of C6 vertebra).

At its commencement it is median, but it inclines slightly to left side as far as root of neck .

Gradually pass again to median plane, at level of T5 vertebra .

Again at level of T7 vertebra, deviates to the left and then turns anteriorly to the esophageal opening in diaphragm

-Nasal Part (Nasopharynx)

Lies behind the nasal cavity, and extends from base of skull to upper surface of soft palate, at the level of C1 vertebra.

It communicates anteriorly with the nasal cavity through the posterior nasal openings (choanae).

Inferiorly, it becomes continuous with the oropharynx behind the soft palate through the pharyngeal isthmus

The pharyngeal opening of auditory tube lies on lateral wall, through which the .pharynx communicates with the middle ear (tympanic cavity)

It is guarded above and behind by a prominent rounded ridge, the tubal ridge, .formed by the underlying proximal end of the cartilagenous part of auditory tube

Here, the mucous membrane contains lymphatic tissue known as the tubal tonsil.

The tubal ridge is in the shape of an inverted J, the long limb lying posteriorly and being continued downwards as salpingopharyngeal fold, produced by the underlying salpingopharyngeus muscle .

Behind the tubal elevation, there is a narrow vertical gutter, the pharyngeal recess.

The roof forms a continuous slope with the posterior wall .

Here lies a collection of lymphoid tissue, prominent only in children, the pharyngeal tonsil .

When enlarged the nodules are commonly known as the adenoid, which sometime may cause complete obstruction of the tube.

-The constrictors, however does not extend up to base of skull, and the gap between the upper border of the superior constrictor and the base of the skull is filled by tensor veli palatini and levator veli palatini, and closed by a rigid membrane, the pharyngobasilar fascia

-there is a gap between superior and middle constrictors, through which stylopharyngeus enters pharynx

-greater omentum: The greater is a storage house for fat .

In addition, the greater omentum contains numerous fixed macrophages, which can be mobilized as free macrophages

-Caecum: Is the blind pouch of large intestine that lies in right iliac fossa below level of ileocecal junction, and above lateral half of the inguinal ligament

-Appendix:

Its base opens into the posteromedial wall of cecum 2 cm below ileocecal valve

In relation to the anterior abdominal wall, the base of appendix is situated one third of the way up the line joining the right anterior superior iliac spine to the umbilicus

Blood supply of anal canal:

Arterial supply: Derived principally from superior rectal artery with contributions .from middle and inferior rectal and median sacral arteries

a. Superior rectal artery

-Is direct continuation of inferior mesenteric artery

-Descends in root of sigmoid mesocolon

-At the level of S3 vertebra (where the rectum commences) it divides into right and left branches, which descend on each side of rectum and subdivides into smaller branches

These branches pierce the muscular wall and supply the whole thickness
of the rectal wall including the mucous membrane.

-They continue in the submucosa of the rectum and thence in the anal columns and end in a dense capillary plexus at the level of the anal valves, which anastomose with branches of the inferior rectal artery

b. Middle rectal artery:

- Is a branch of internal iliac artery.

- It is present in only one in five people.

- It supplies only muscle of middle and lower portions of rectum.

c. Inferior rectal artery:

-Is a branch of internal pudendal artery, in the perineum.

-It supplies the internal and external anal sphincters, portion of anal canal below anal valves (lower half of the canal), and perineal skin

d. Median sacral artery:

Supplies the posterior wall of anorectal junction, and of the anal canal

-In addition to the sphincter, the lower part of rectum and upper part of anal canal are supported by puborectalis muscle, which passes around their lateral and posterior sides like a sling.

-Contraction of puborectalis muscle causes the angle between rectum and anal canal to become more acute.

-Thus its contraction is an important factor in preventing passage of feces from rectum to anal canal

With the exception of stylopharyngeus and cricopharyngeus which are supplied by glossopharyngeal nerve and external laryngeal nerves, respectively, all other muscles of pharynx (superior constrictor, middle constrictor, inferior constrictor, palatopharyngeus, sulpinogoharyngeus) are supplied by pharyngeal plexus of nerves

Remember