Collagenous (in anatomy, pathology, and imaging) The term collagenous refers to any tissue, structure, or material that is composed primarily of collagen, the most abundant structural protein in the human body. Collagen provides tensile strength, structural integrity, and support to connective tissues.

 Key Features of Collagenous Tissue: Composition: Mainly Type I and Type III collagen fibers

Appearance: – White, dense, fibrous in gross anatomy – Hypointense (dark) on T2-weighted MRI due to low water content – Eosinophilic (pink) on H&E histology

Examples: – Ligaments – Tendons – Fascia – Dura mater – Fibrous septa and bands

 Clinical Relevance: Collagenous tissues are non-elastic, resistant to stretching.

Their presence can indicate normal anatomy (e.g., ligaments) or pathology (e.g., fibrosis, scar tissue).

In surgery, collagenous structures often act as anatomical landmarks or barriers.

In imaging, they appear as T2-hypointense structures, easily confused with vessels, nerves, or artifacts.