

# Collagen Degeneration

**Fibrinoid** is a substance that is formed by the disruption of collagen in various organs and tissues.

Especially in blood vessels wall and connective tissue.

Hematoxylin-eosin stain is bright, eosinophilic (red), homogeneous in the light microscope.

**The cause of the fibrinoid is caused by fibrin-like staining.**

However, even if fibrin is sometimes found in the structure, **it is not related to fibrin.**

For example, Geigert's fibrin is stained with fibrin. It is painted red with Karmin. Toluidine blue is colored with red color indicating **metachromasia**

**Collagen deficiency is always formed by extracellular formation.**

**In the fibrinolytic system:**

**It is possible to remove impaired collagen, proteoglycans or residues (mucopolysaccharide acid [glycosaminoglycan, hyaluronic acid]), serum proteins (especially globulin) from the blood, antigen antibody complexes, some fibrin and fibrin intermediates fibrinogen.**

**In addition to these, there are also locally or locally destroyed cell fragments, residues, chromatin fragments, as they always occur in inflammatory, allergic, necrotic events.**

## **Etiology and Pathogenesis**

**It develops especially in hypersensitivity reactions (allergic reaction), in the vascular wall, or in regions rich in connective tissue of various tissues.**

**It is often based on immunological effects, such as the collapse of antigen-antibody complexes on vessel walls.**

**Apart from this, toxic effects and infectious effects which impair vascular permeability are also among the causes.**

**in nodules formed in rheumatism**

**in the gangrenous ganglia of the cattle**

**in the walls of the middle diameter arteries**

**in the walls of the inflamed artery that develops in the urinary tract**

**in the viral arteries of the horses**

**in the three days disease of the cattle (Ephemeral Diseases).**

**MUCUS and MUCOD**

**DEGENERATION**

- \* **The bond occurs due to the increase of amorphous ground substance or expansion by taking water.**
- \* **Methylene blue, toluidine blue, alcian blue painted like dyes. It is an amorphous substance.**
- \* **Collecting a substance similar to mucine in the connective tissue spaces; the tissue parts of the region are degenerate and come from (especially elastin, the collagen melts and disintegrates)**

From morphological standpoint: Completely binding binding resembles embryonic tissue again; loose, gelatinous, peltemic, with a state of being characterized.

\* Since it has a loose appearance like embryonal connective tissue, it is called myxomatous degeneration.

**It is seen in a group of diseases called "collagen tissue diseases". For example: In rheumatism, fibrinoid degeneration as well as mucoid degeneration occur.**

**Hence, the connective tissue is placed in the rich organs and tissues. Especially Between the bundles of cardiac and skeletal bundles or smooth muscle bundles on the walls of the arteries; loose connective tissue areas under serosa and other membranes.**

**Seroses are swollen, pelt-like. The section is in the form of a broad, gelatin-yellowish mass in the loose connective tissue beneath the serosa.**

Mucoid degeneration is shaped by various causes

If it is toxic, the main reason is protein deficiency.

Disruption of ground substance, collagen breakdown, water intake.

**Senile (old age) atrophy** is still related to nutritional deficiency (protein deficiency) Sometimes the connective tissue of the neck and ligaments can be shaped