Hyalin ve Hyalin Degeneration

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Hyaline means "glass" in Greco. The reason for the term of hyalin is that during the light microscopic examination of the HE and PAS (periodic acid schiff) stained tissues: they are located intracellularly and extracellularly; homogeneous pink color, amorphous, glassy areas, masses, droplets visible.

Its basic structure is impaired, consisting of proteins that have collapsed into or out of the cell.

Each hyalin is not degeneration.

***** Each hyalin is not pathological unless it reflects a basic disorder; It can also be physiological.**

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Its basic structure is impaired, consisting of proteins that have collapsed into or out of the cell.

Thus, hyaline accumulating in or outside the cell is considered within the context of protein metabolism disorder.

However, although the light microscopic morphological appearance is the same, the chemical composition, location and etiology of the tissues are different.

Hyalin

Not every hyaline is pathological unless it reflects a basic disorder; It can also be physiological.

For pathological counting, either directly or indirectly, protein metabolism must be impaired.

e.g
Hyalinization is a pathologic phenomenon seen in connective tissue cells of the vessel wall in the area of chronic inflammatory granulation or arteriosclerosis.

However, the hyalinization of corpus albicans, which is formed in the ovary, is physiological; it does not fall within the scope of degeneration.

Each hyalin is not covered by degeneration.

e.g

If muscle hyalinization occurs, it is hyalin degeneration.

However, the presence of hyaline droplets in the epithelial tissue (for example in the tubul epithelia) does not indicate hyaline degeneration.

Hyalin

Hyalin is accumulated inside the cell in the epithel tissue, inside and outside of the cell at the mesenchimal tissue. It also accumulates in the tissue spaces.

From this perspective :

It is important in terms of defining the tissue it develops. It is the intracellular one in shaped muscles that exactly matches the definition of degeneration. It is also called Zenker degeneration.

The hyalinization of connective tissue is generally called hyalinose (hyalinosis).

In such cases, lack of nutrition lies at the basis of the hyalinization found in the connective tissue.

As a matter of fact, in the case of chronic granulation, the collagen fibers increase and pressure decreases the capillar veins; hyalinize because the tissue can not feed.

The beginning of hyalinization from regions far from veins supports this argument. Hyalinization in some connective tissue areas in the elderly is also related to nourishment.

Physiologically, the corpus luteum becomes corpus albicans and hyalinization rests on its ability to reduce its nourishment, which it does not need.

Classification

Hyalin

Localization within or outside the cell;

the type of tissue; physiological or pathological formation;

other degenerative changes in the tissues and cells,

it is classified as follows.

Intracelluler hyalin

Physiological:

Settles in the gland epithelium

pathological:

- The outcome of the disorder in the cell,
- Depending on the albumen taken from outside the cell,
- Chronic toxic or dietetic effects (eg Mallory bodies),
- occurs in protein secretion disorders (eg, Russell bodies that are shaped by immunoglobulin synthesis disorder).

Extracellular hyalin

- In the form of hyalinose-like ligaments (end-of-age heart valves, ligaments, connective tissue of serous membranes, as in the spinal cord).
- Hyaline cylinders in the glands, ducts, lumens of the lung alveoli, hyaline membranes, corpora amylacea.

Hyalin degeneration

Zenker degeneration at muscle cells