



PRACTICAL HISTOLOGY 1 - FIRST COURSE

LAB -10- CARTILAGE

Sawa University

جامعة ساوة الاهلية

College of health and medical techniques

كلية التقنيات الصحية والطبية

Department of Medical Laboratories

قسم تقنيات المختبرات الطبية

First stage

المرحلة الاولى

محاضرة رقم 10

الجانب العملي

Lecture No. 2

Practical

تدريسي المادة : م.م هبه صاحب صادق

Aims of lecture :-

A LECTURE ON CARTILAGE AIMS TO PROVIDE A
COMPREHENSIVE UNDERSTANDING OF THIS SPECIALIZED
CONNECTIVE TISSUE, COVERING ITS STRUCTURE, FUNCTION,
TYPES, AND LIMITED HEALING CAPACITY.

❖ Cartilage

- Cartilage is a special type of connective tissue that also originates from mesenchyme. Cartilage is primarily composed of cells called chondrocytes.
- There are three main types of cartilage in the body:
 1. Hyaline cartilage
 2. Elastic cartilage
 3. Fibrocartilage

- **Hyaline Cartilage**

Hyaline cartilage is the most common of the three types of cartilage.

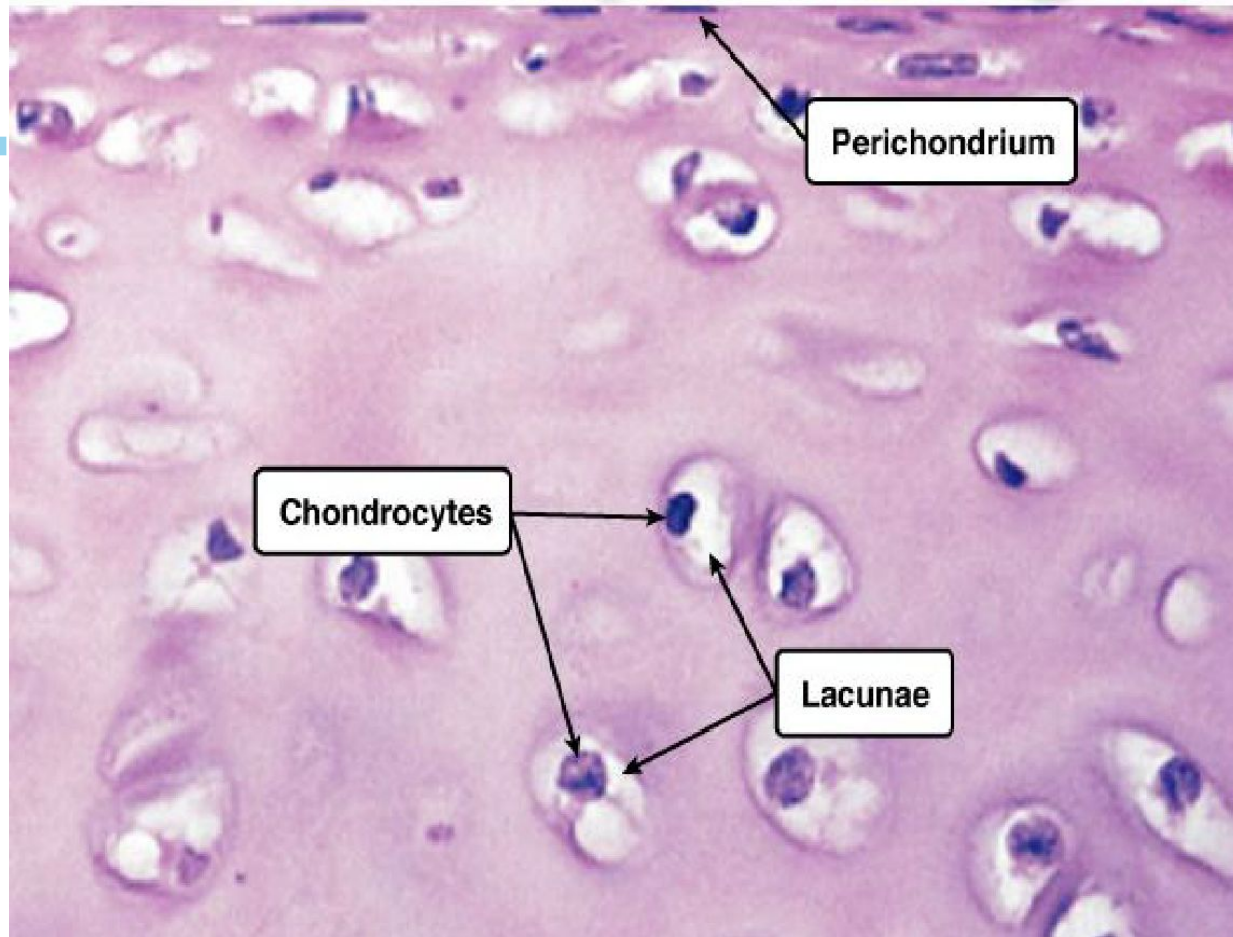
Hyaline cartilage is located in the articular surfaces of movable joints, in the walls

Of the respiratory tracts (nose, larynx, trachea, and bronchi).

Function of hyaline cartilage:

- Reduces friction in joints.

- Structure and support.



- **Elastic Cartilage Elastic**

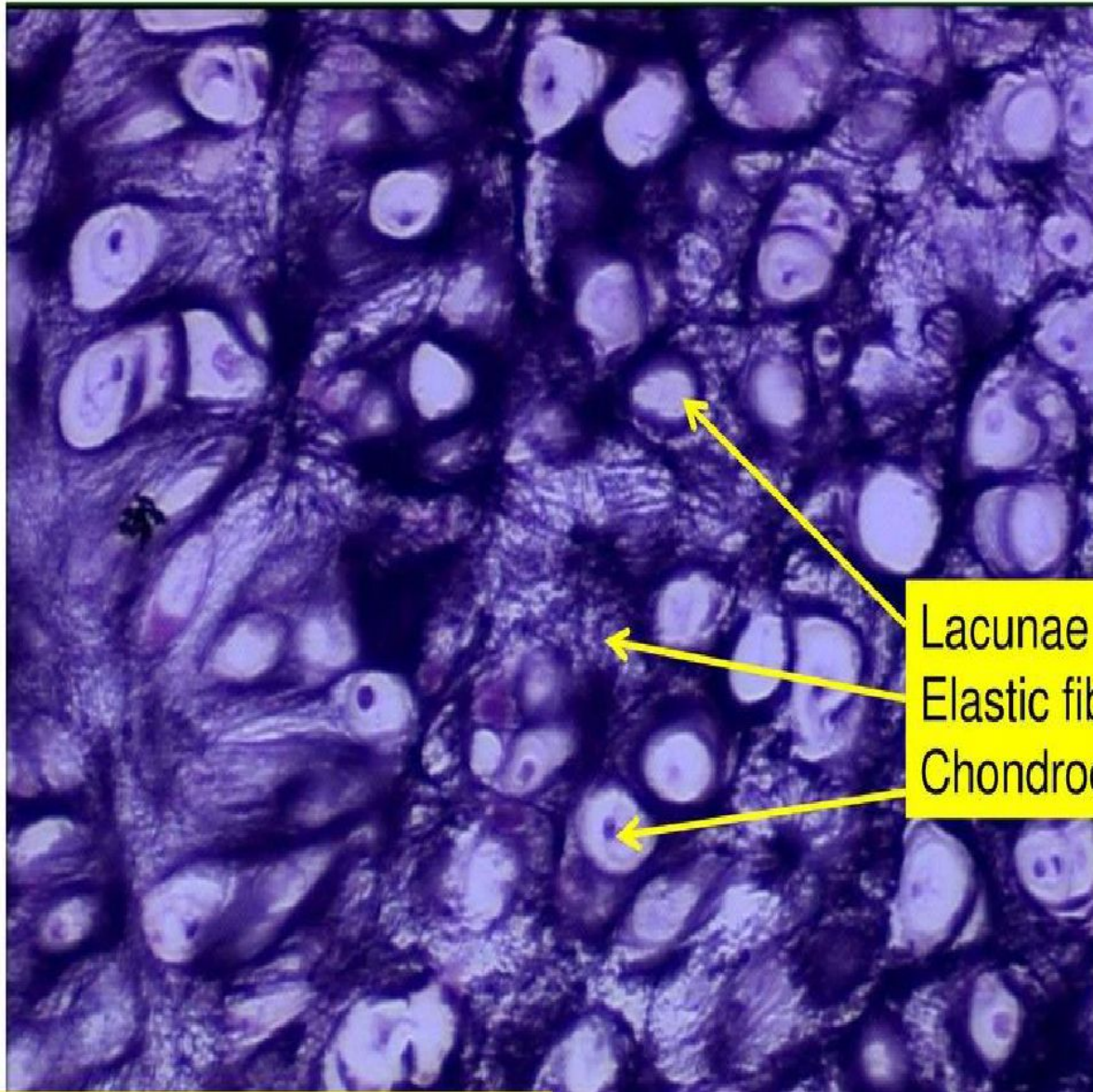
cartilage, sometimes referred to as yellow fibrocartilage, is provides

both strength and elasticity to certain

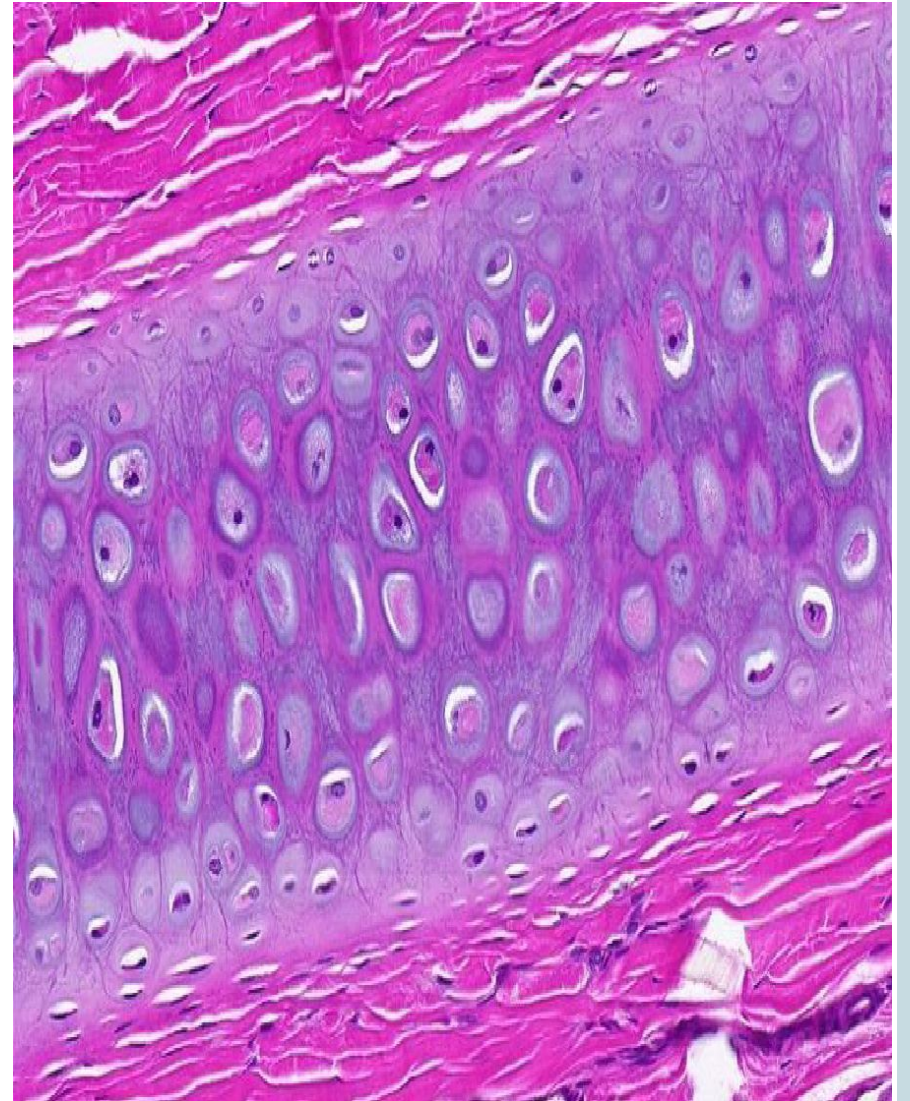
parts of the body, such as the ears and epiglottis Elastic cartilage has a perichondrium

Function: Maintains the shape of a Structure while allowing great flexibility

Location: Supports the external ear (Pinna) and epiglottis



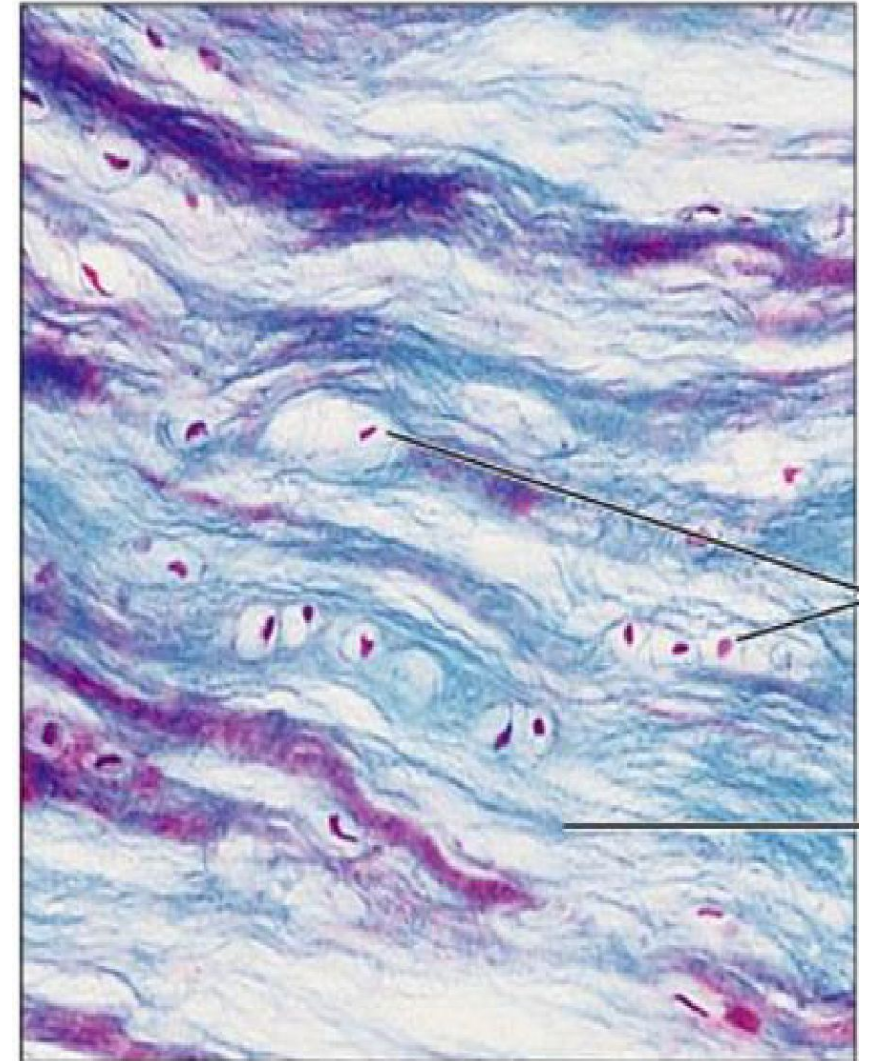
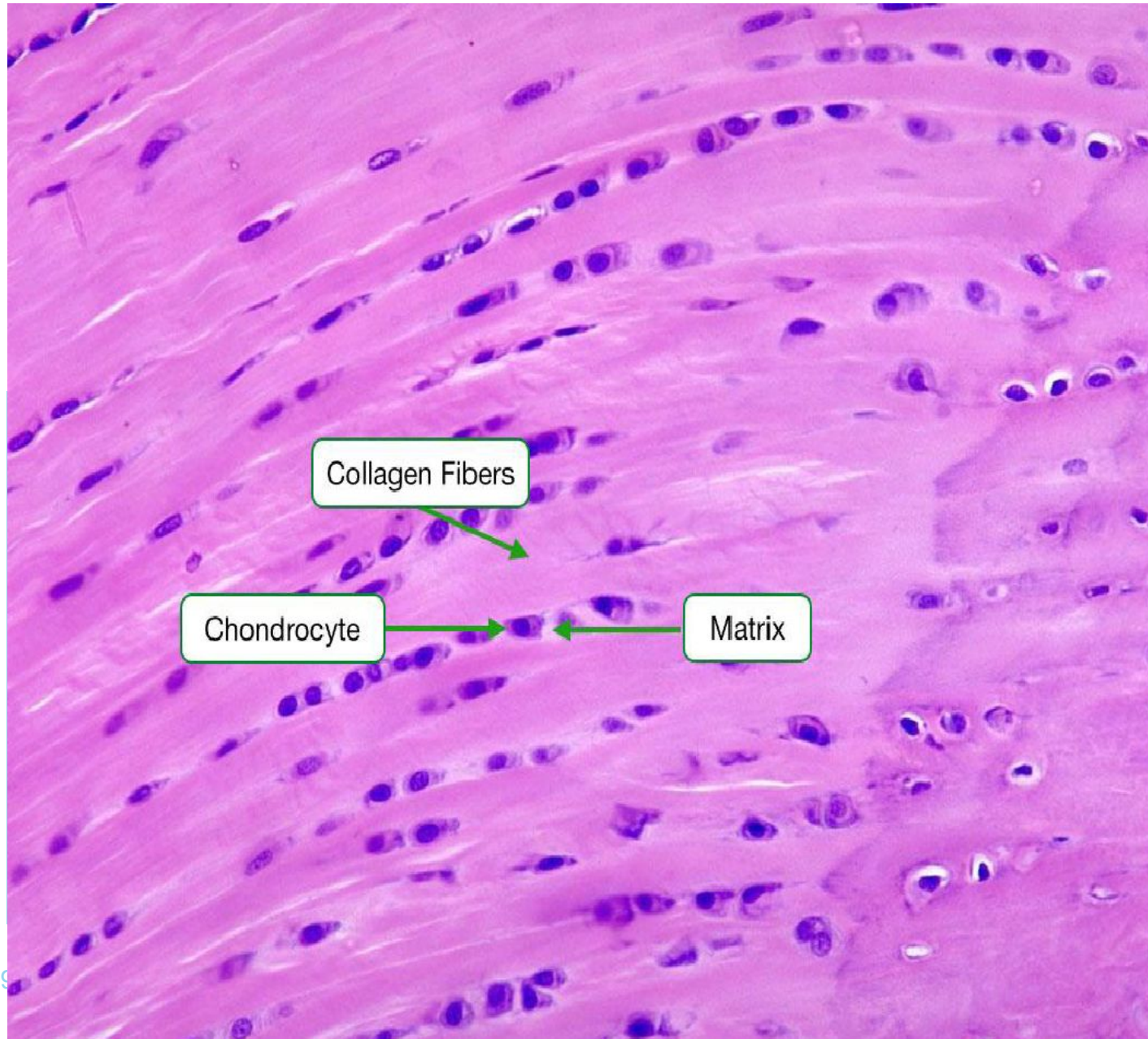
Lacunae
Elastic fibers
Chondrocytes



Fibrocartilage: is a transition tissue that has a mix between hyaline cartilage and dense fibrous connective tissue

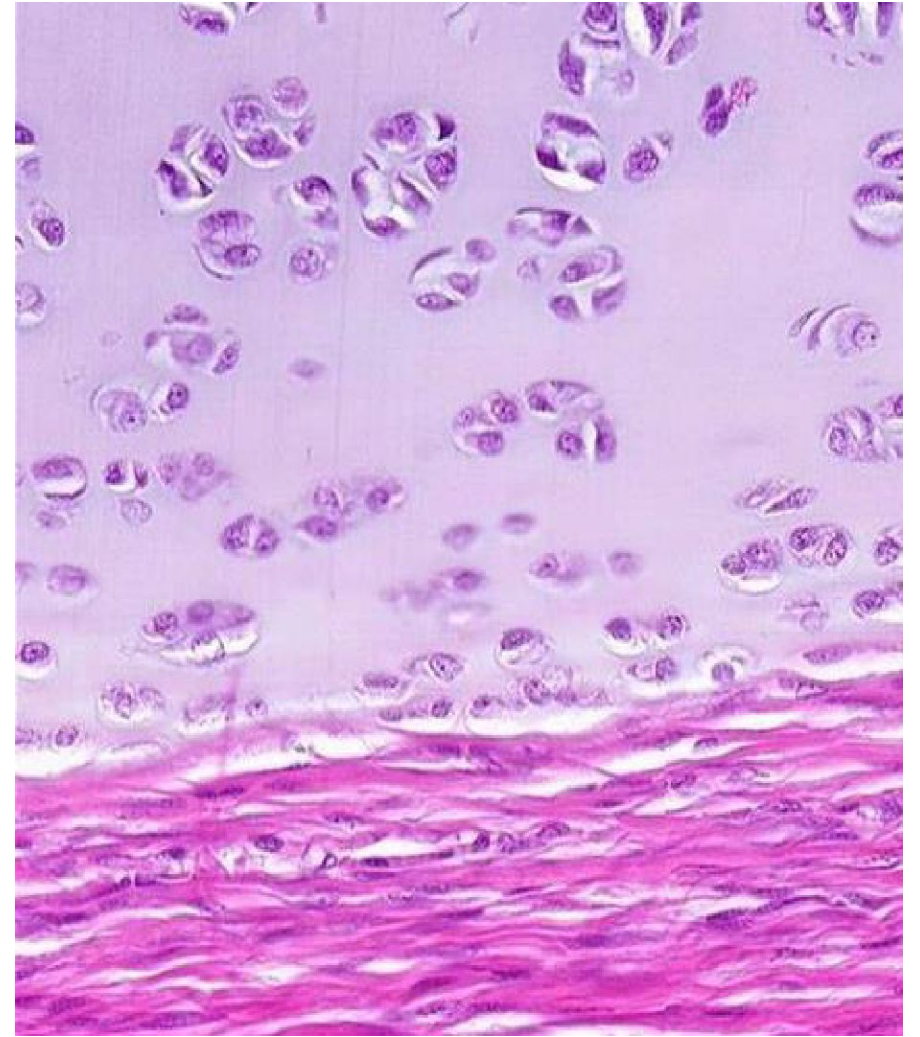
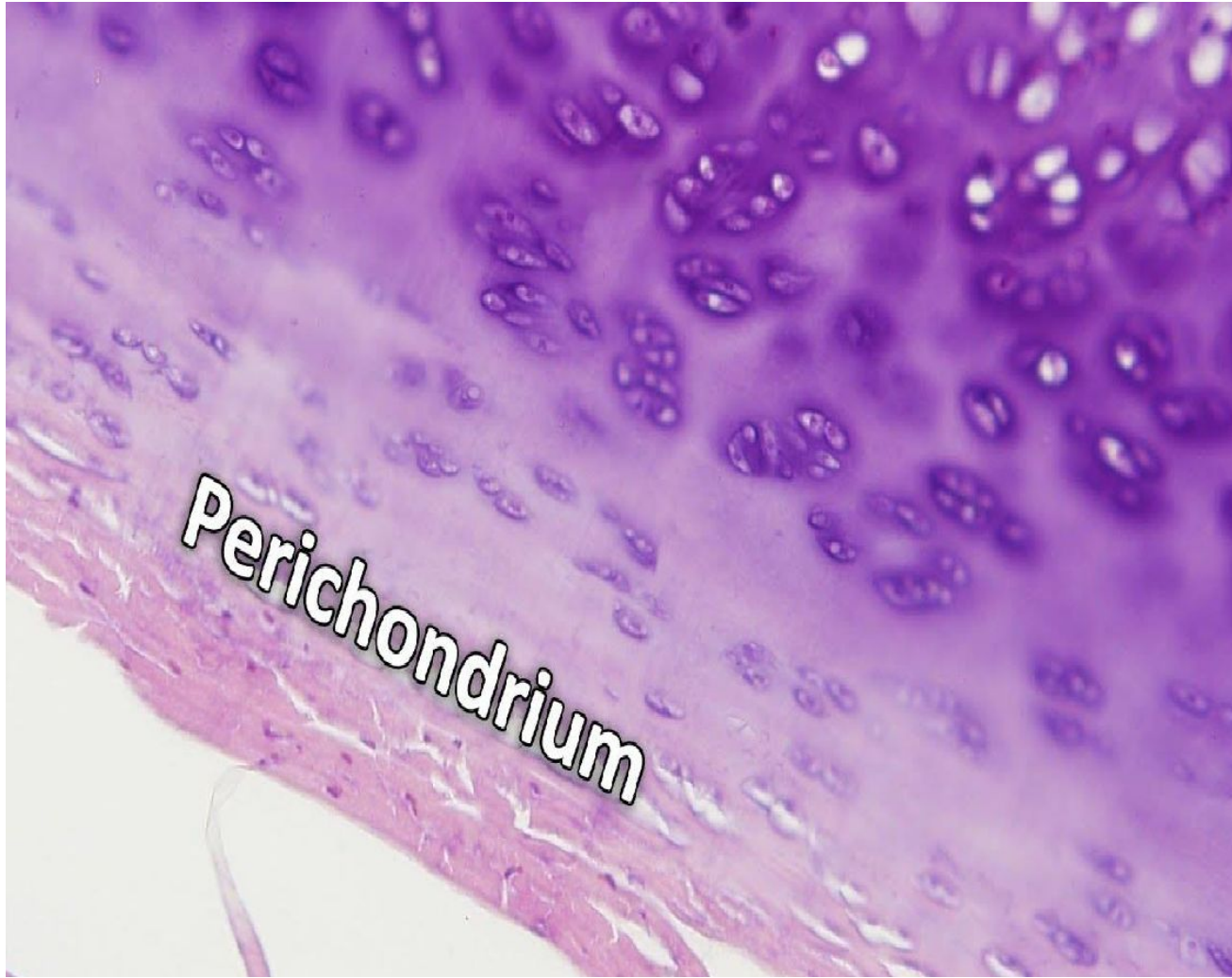
Function: Tensile strength with the ability to absorb compressive shock

Location: Intervertebral discs knee joint discs



Perichondrium: The perichondrium is a dense layer of fibrous connective tissue that covers cartilage in various parts of the body.

Perichondrium tissue commonly covers these areas: Hyaline cartilage and Elastic cartilage.



Discussion :-

1-What is the Cartilage?

2- What are the types of cartilage?

References

- Pathologic basis of diseases, A57 edition, 2012.
- <http://waynesword.palomar.edu/images/plant3.gif>.

Any questions?

*Thank
You*