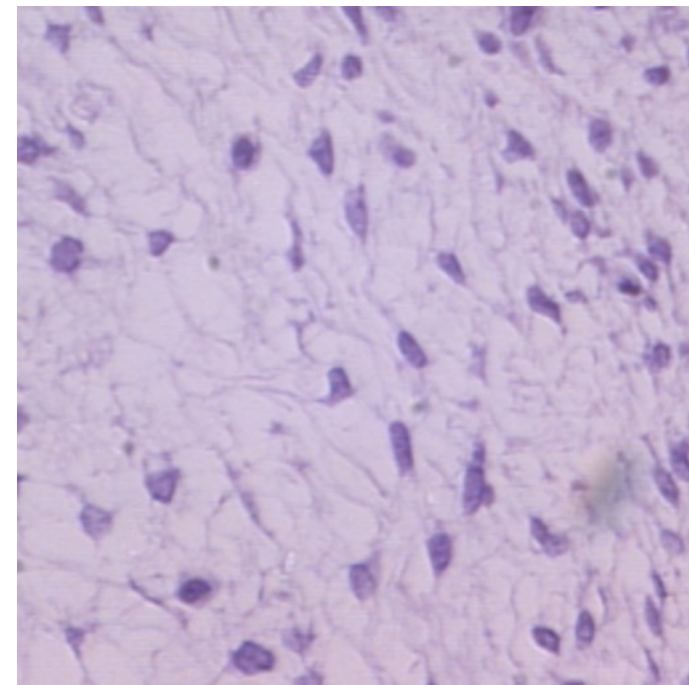
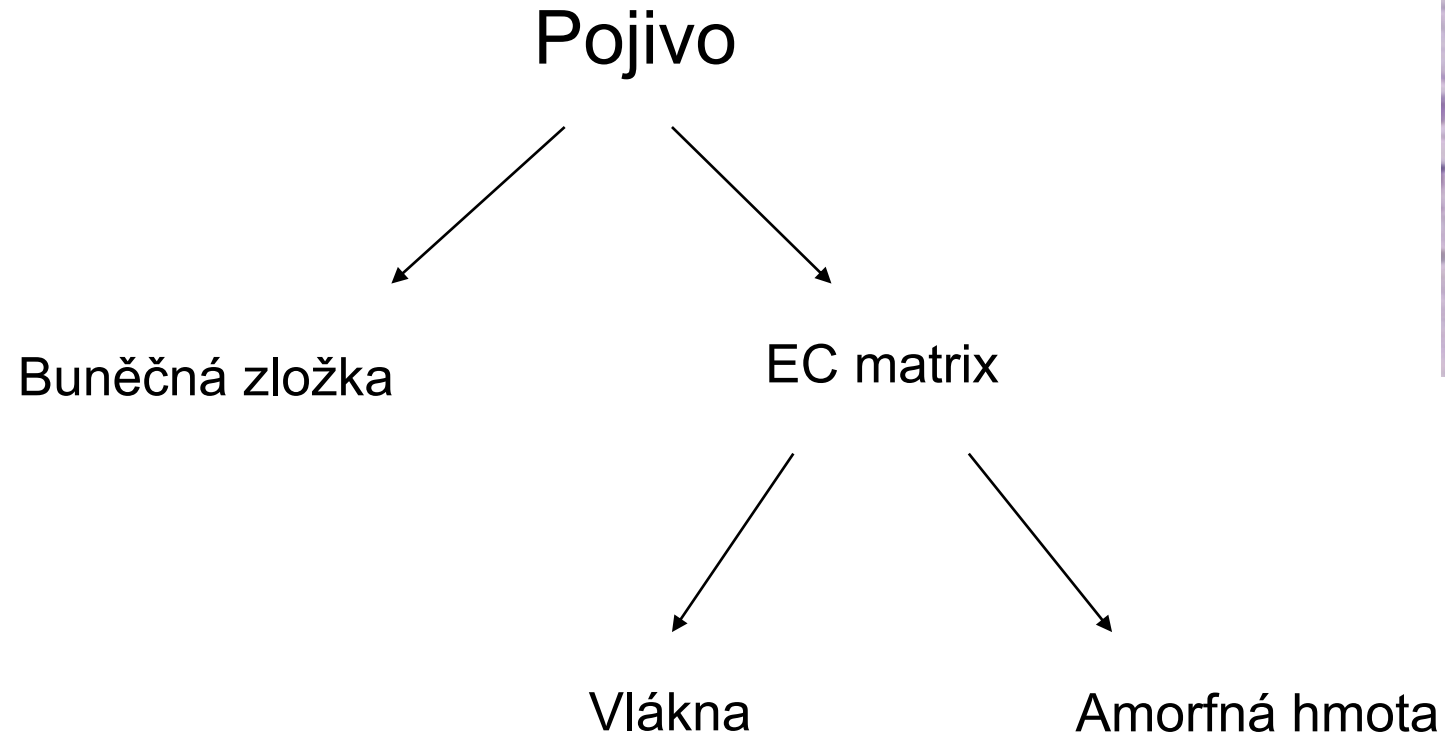


M U N I

M E D

Pojivové tkáně, Vazivo

Charakteristika pojivové tkáně

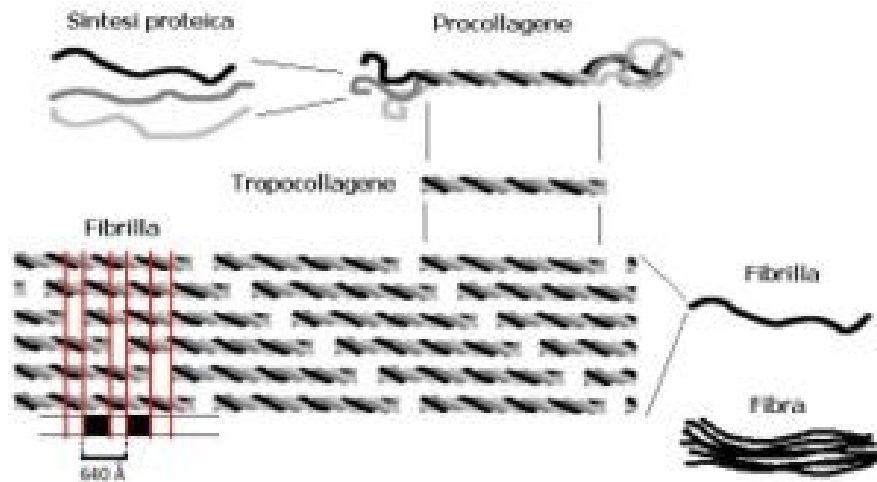


<http://www.anatomie.net/histowebatlas/m-139b.htm>

Typy vláken

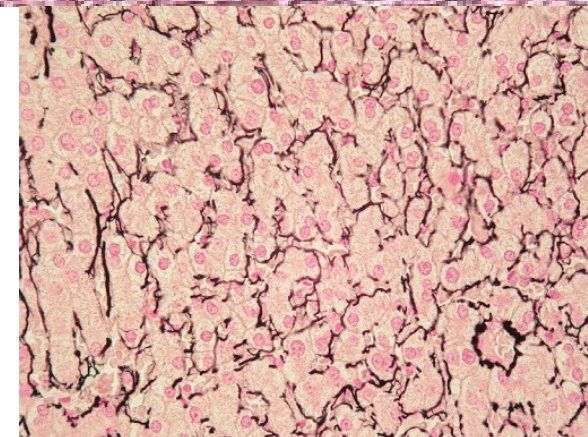


1. Kolagénne



<https://cs.wikipedia.org/wiki/Kolagen>

2. Elastická



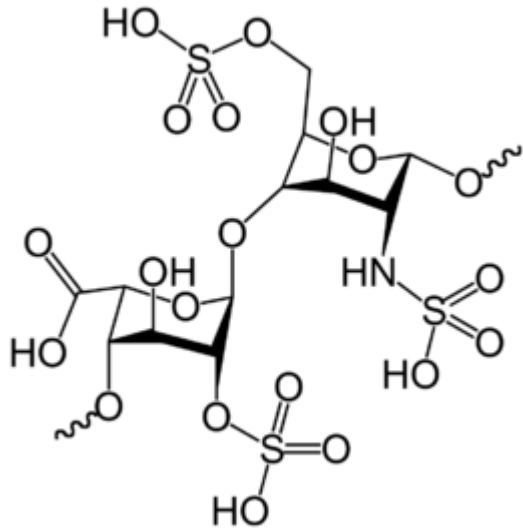
3. Retikulárne

Základná hmota amorfná

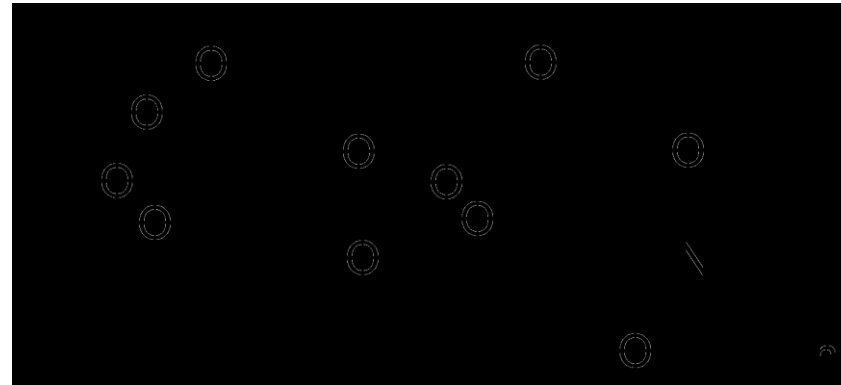
Jej súčasťou sú:

- 1. Glykosaminoglykany**
- 2. Proteoglykany**
- 3. Glykoproteíny**

Glykosaminoglykany



<https://cs.wikipedia.org/wiki/Heparin>

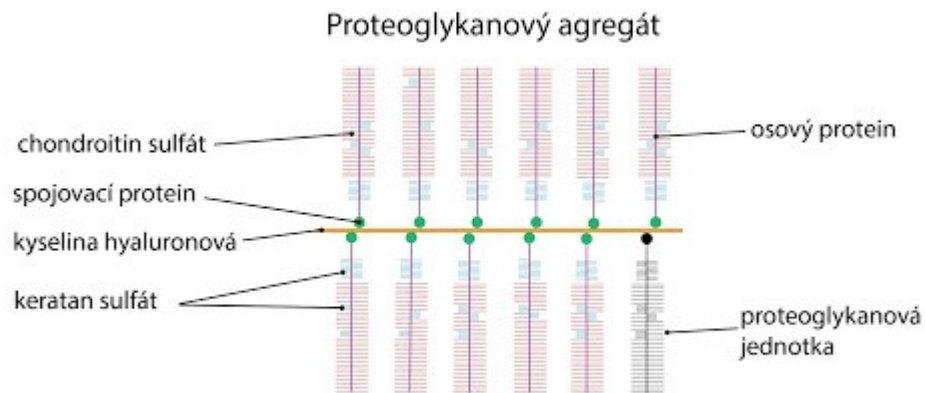


https://cs.wikipedia.org/wiki/Kyselina_hyaluronov%C3%A1

Proteoglykany a glykoproteíny



Proteoglykany



<http://fblt.cz/skripta/ii-premena-latek-a-energie-v-bunce/140-2/>

Sacharidy > Proteíny

Glykoproteíny



<https://www.intechopen.com/books/glycosylation/structural-biology-of-glycoproteins>

Sacharidy < Proteíny

Bunky väziva 1.

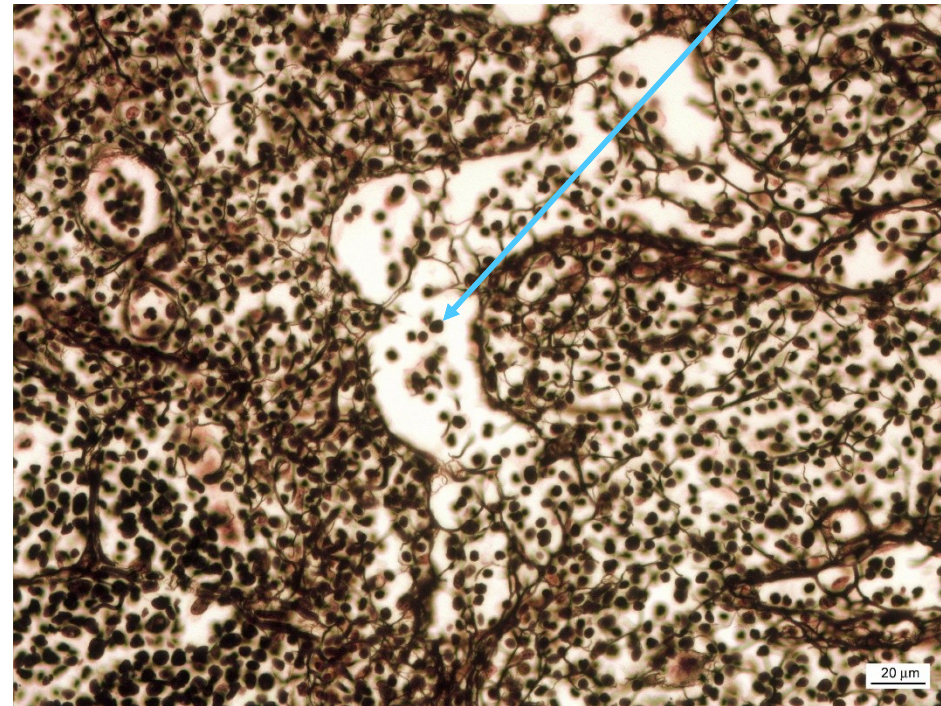


Fibroblasty



<https://en.wikipedia.org/wiki/Fibroblast>

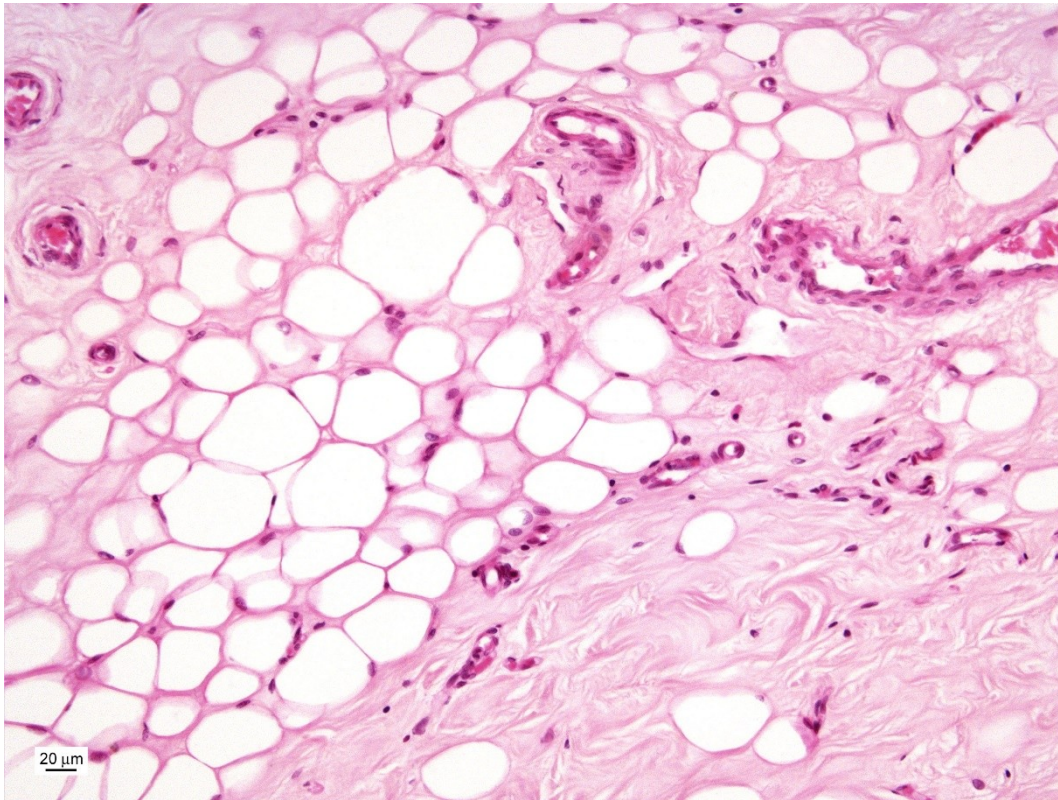
Retikulárne bunky



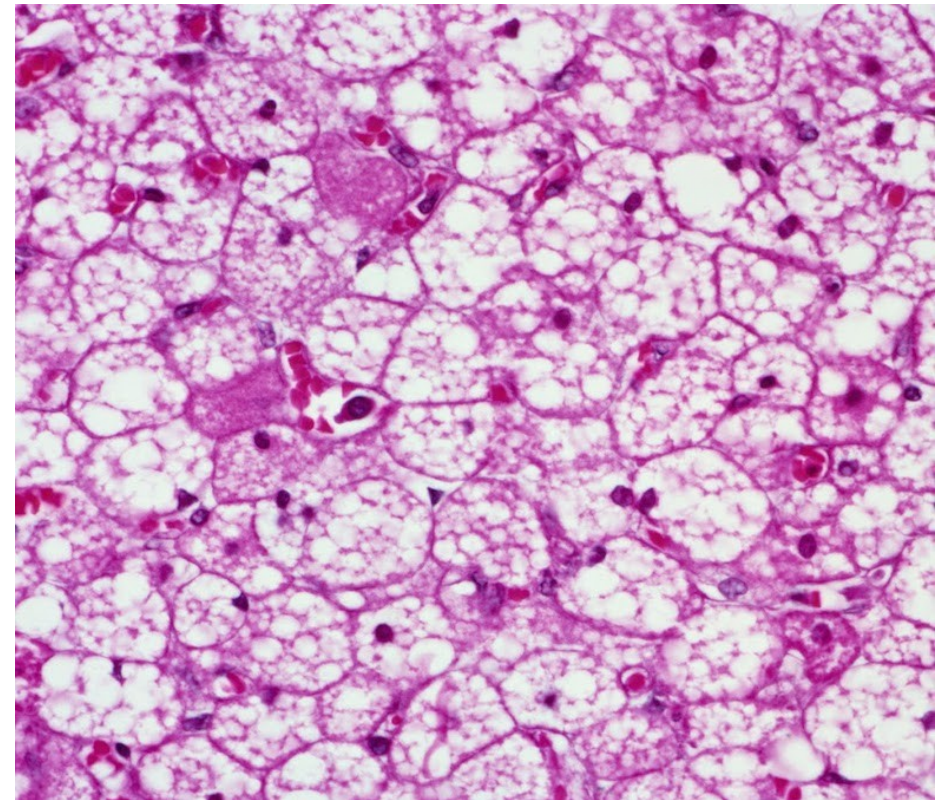
Bunky väziva 2.- adipocyty



Unilokulárne adipocyty



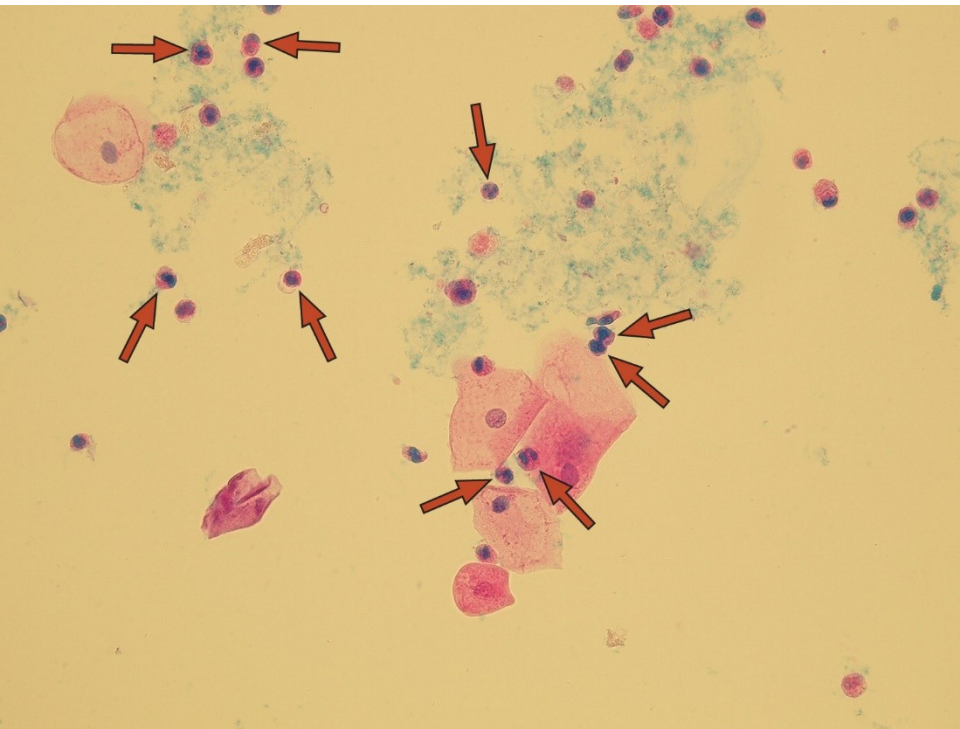
Multilokulárne adipocyty



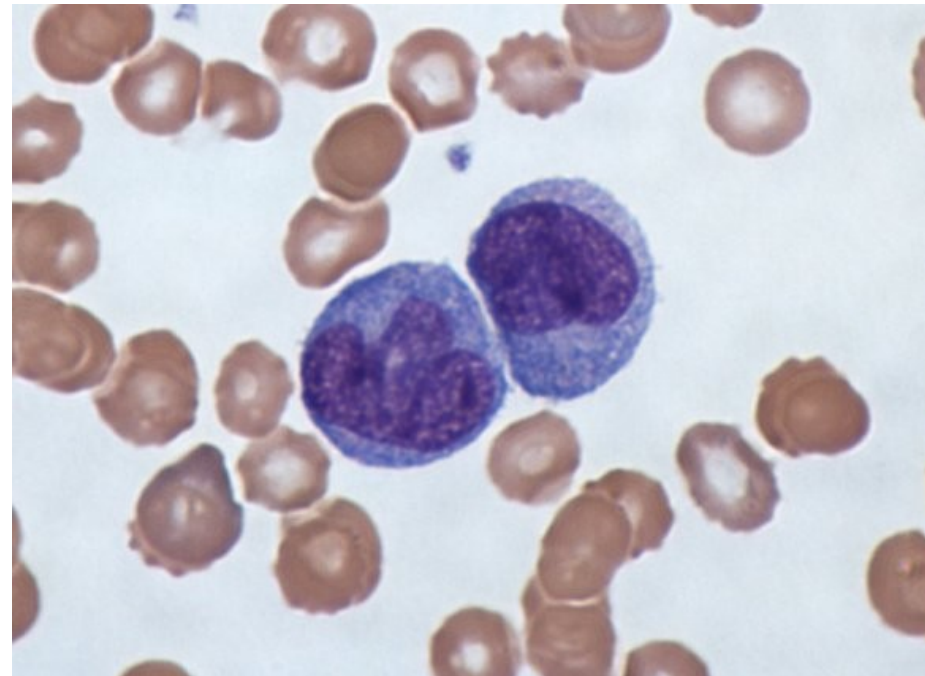
<https://focusonpath.com/in-vivo-noninvasive-detection-of-brown-adipose-tissue-through-intermolecular-zero-quantum-mri/>

Bunky vaziva 3.- leukocyty a ich derivaty

Granulocyty +
lymfocyty



Makrofagy

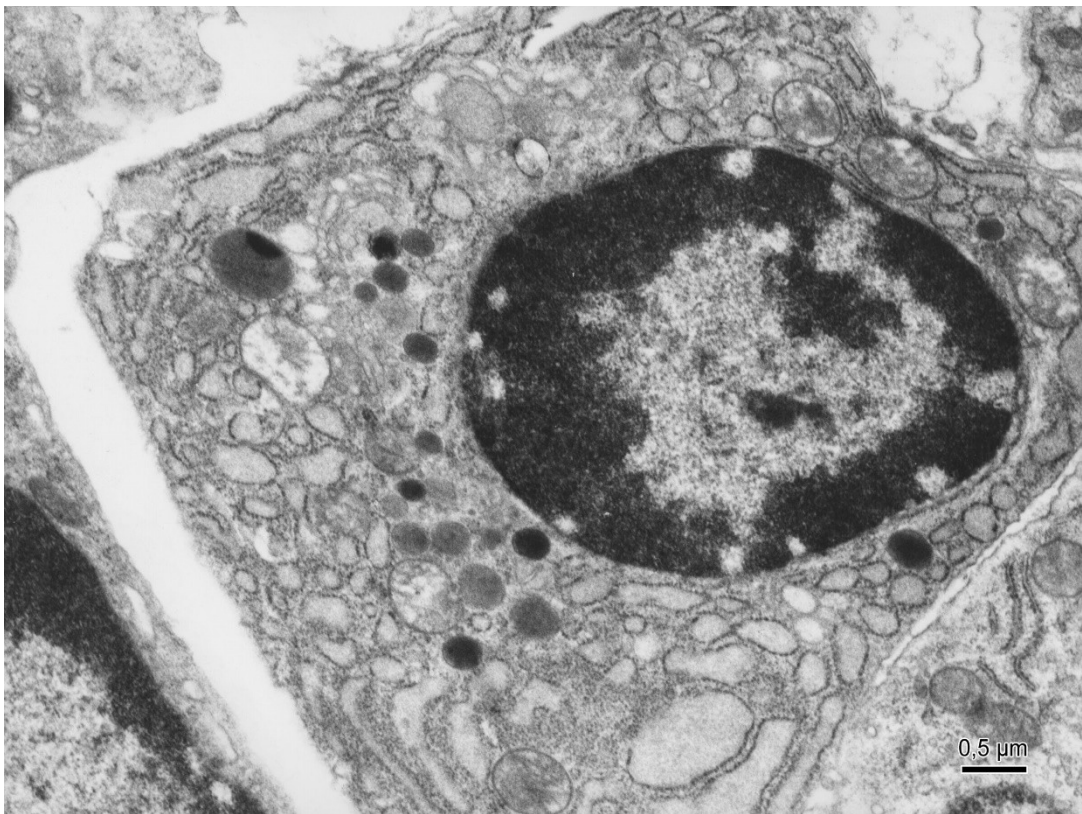


wikipedia.org/macrophages

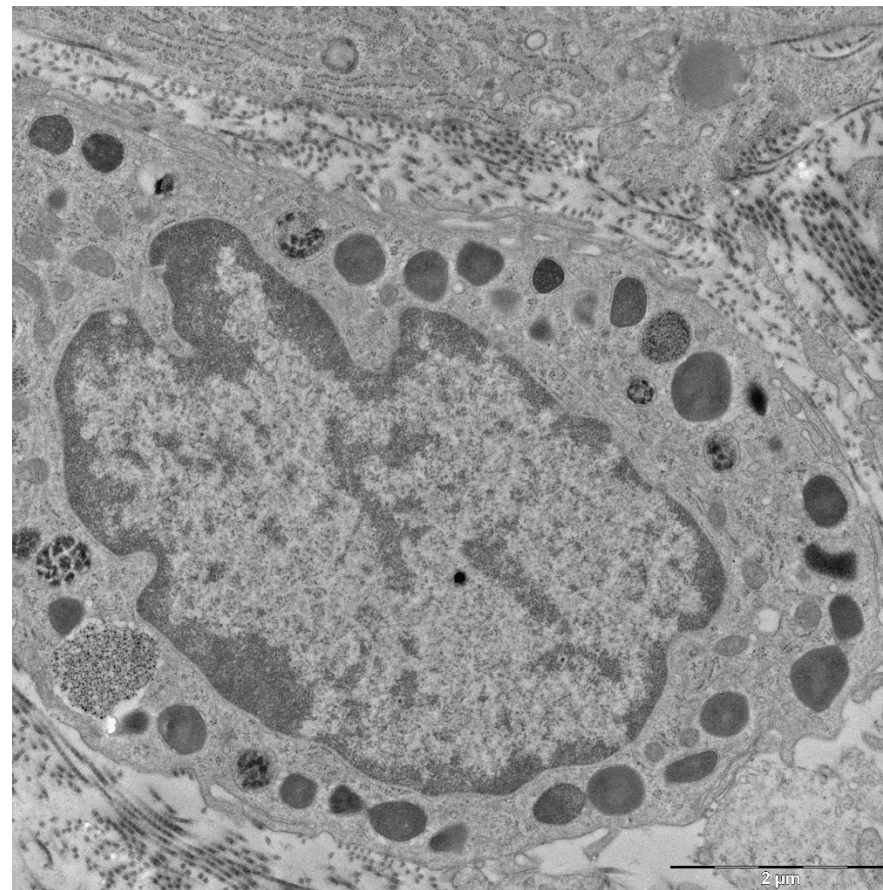
Bunky vřziva 4.



Plazmatické bunky



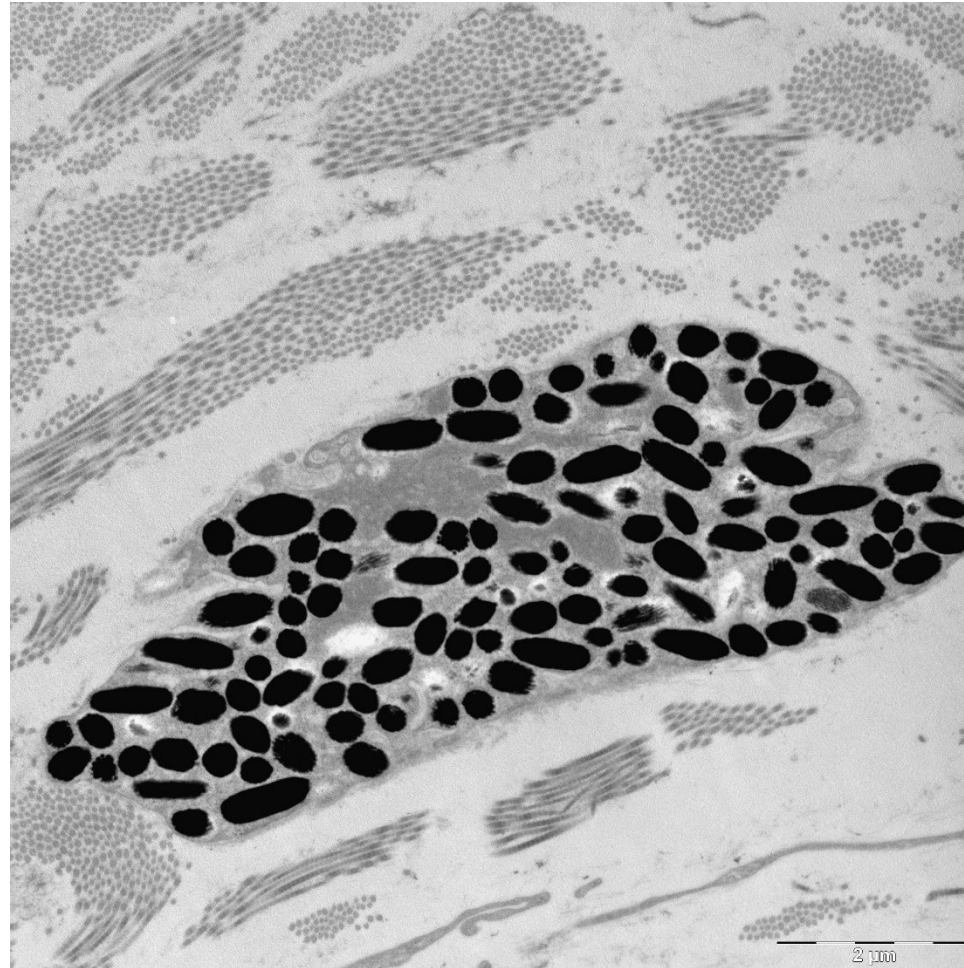
Źirné bunky



Bunky väziva 5. – špeciál na záver



Melanocyty – pôvod v neuroektoderme



Funkcie väziva

Rôzne funkcie väziva budú dané rôznym zastúpením jednotlivých buniek či vláken:

- 1. Mechanická** – daná hlavne kolagénom a ECM – tie produkujú fibroblasty
- 2. Nutritívna** – prechod ciev bude ľahší vtedy , keď bude prítomných menej vláken
- 3. Imunitná** – podmienkou je prítomnosť ciev – z nich dokážu migrovať biele krvinky
- 4. Zásoba energie** – musíme mať prítomných veľa adipocytov
- 5. Nosná sieť orgánov** – potrebujeme retikulárne vlákna a bunky

**A keď využijeme všetky tieto poznatky ,
dokážeme si jednoducho odvodiť typy
väziva a ich stavbu...**



<https://www.vectorstock.com/royalty-free-vector/easy-peasy-lemon-squeezy-funny-typography-design-vector-24076499>

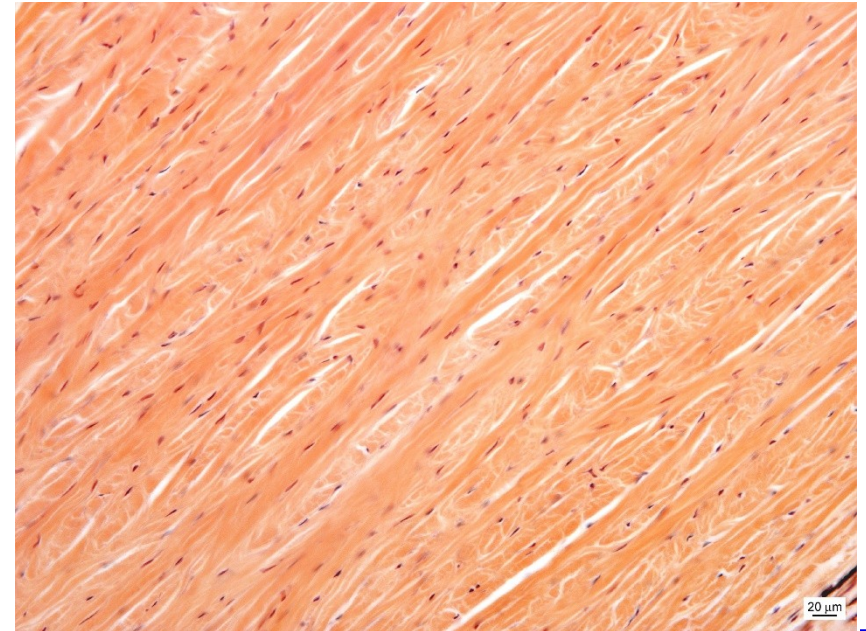
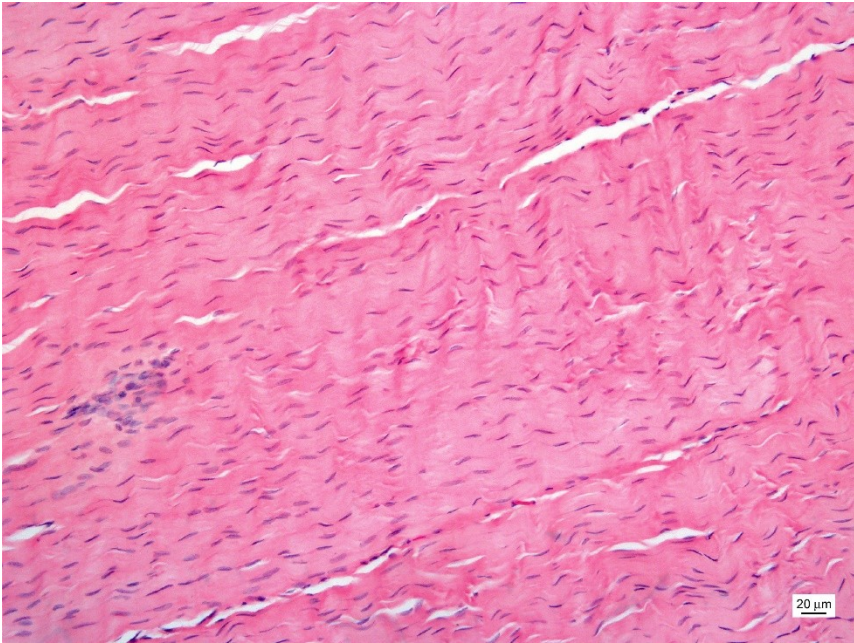
Typy väziva 1.



Husté kolagénne väzivo

Usporiadané

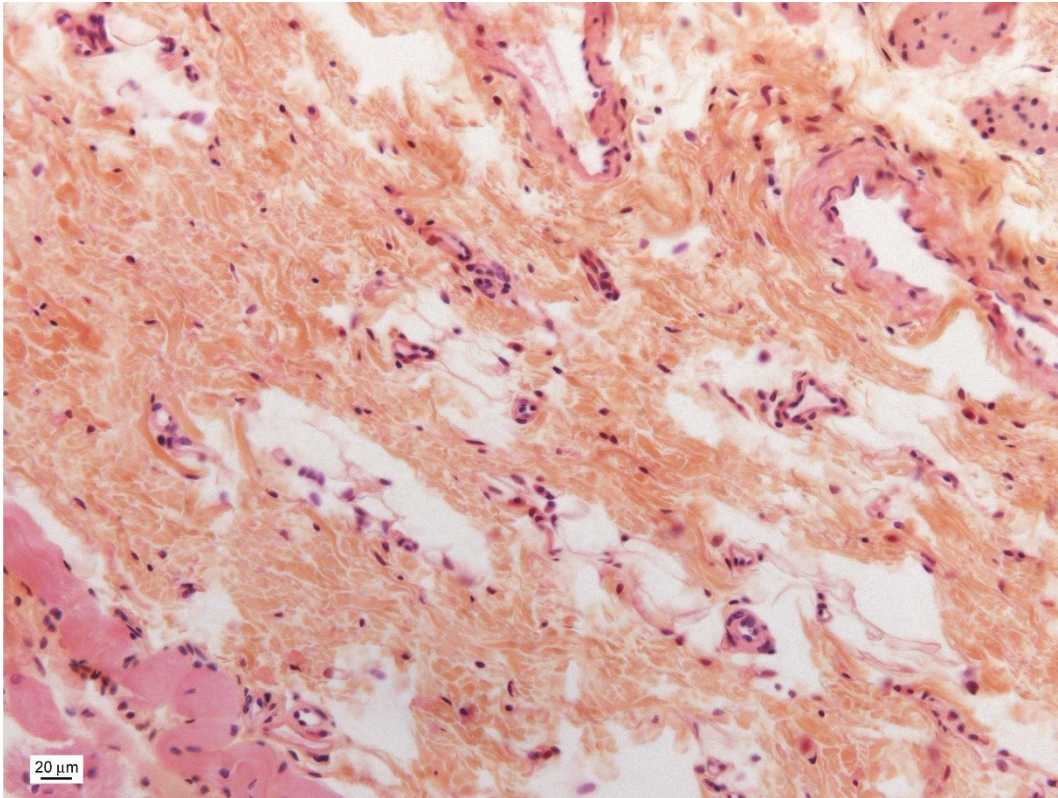
Neusporiadané



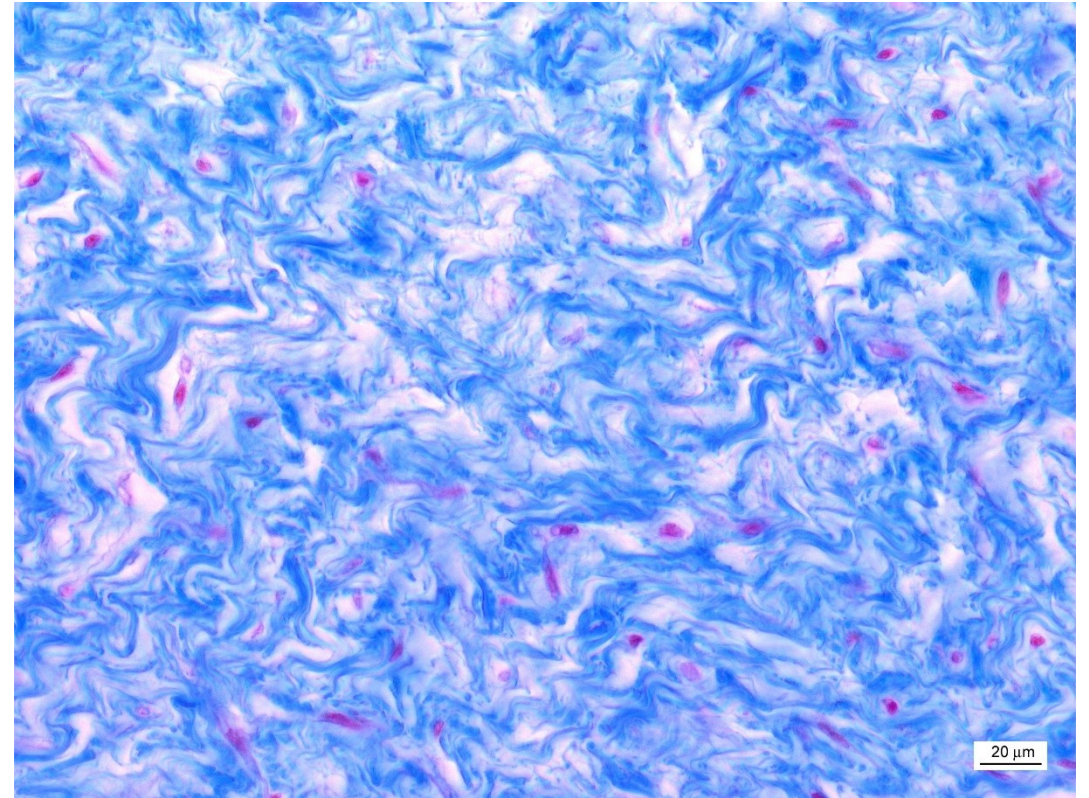
Typy väziva 2.



Riedke kolagénne



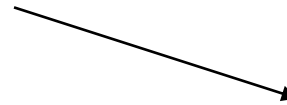
Rôsolovit 



Typy väziva 3.

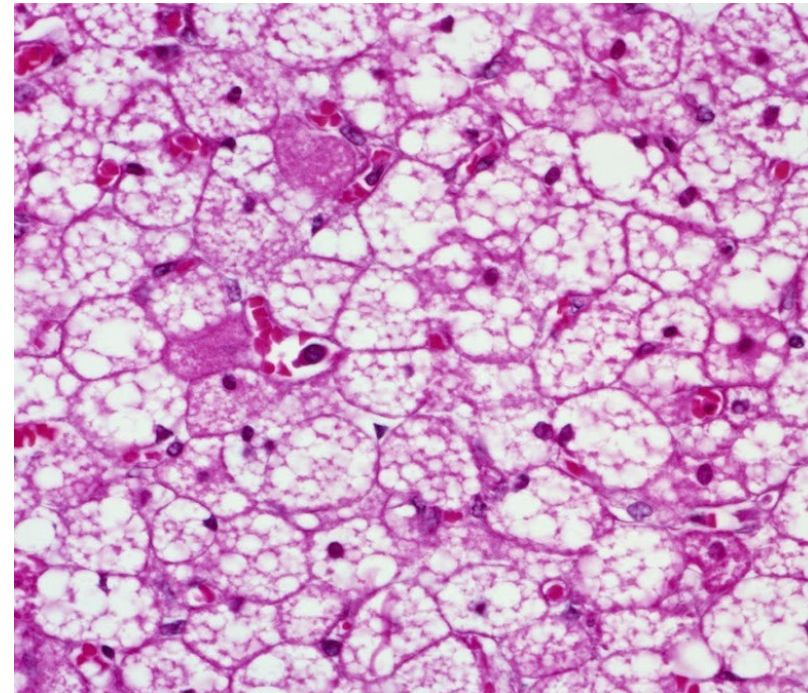
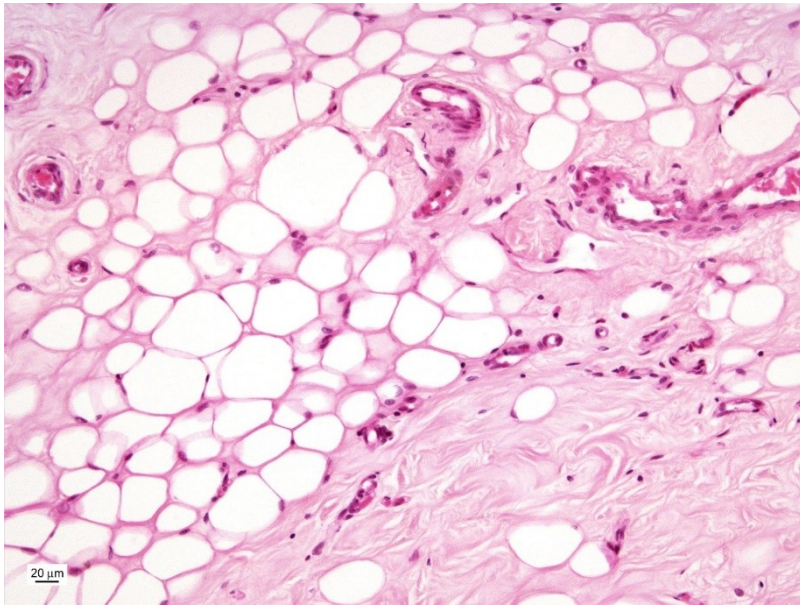


Tuková tkáň



Biela

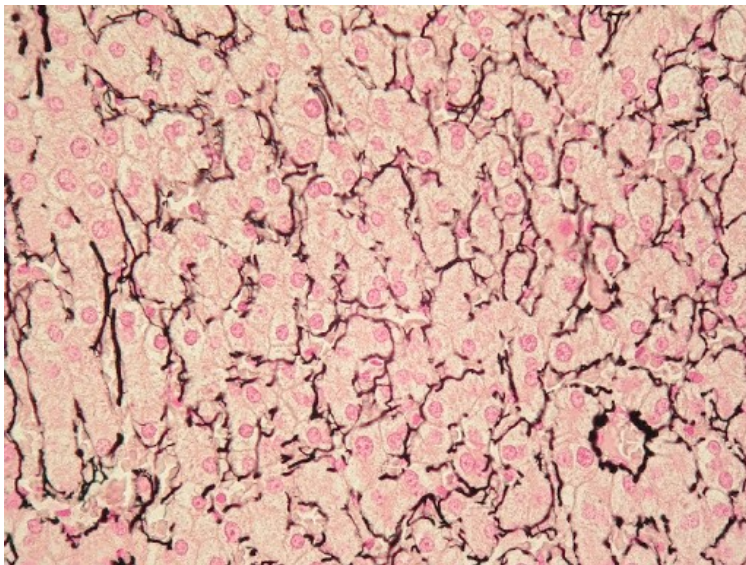
Hnedá



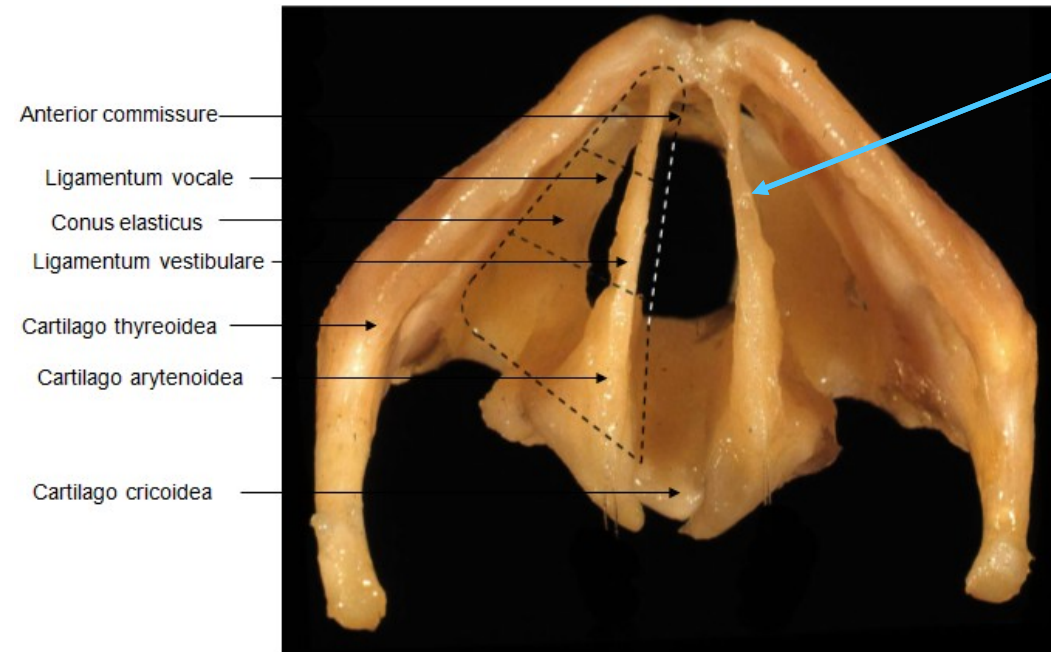
Typy väziva – 4.



Retikulárne väzivo



Elastické väzivo



https://www.researchgate.net/figure/Bony-and-fibroelastic-structures-of-the-larynx-Axial-view-Specimen-of-the-scientific_fig2_224899279

Ďalšia literatúra

- Histologický atlas LF MUNI- (<https://munispace.muni.cz/library/catalog/book/140>)
- Elektronově mikroskopický atlas LF MUNI



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Petr Vaňhara

2020