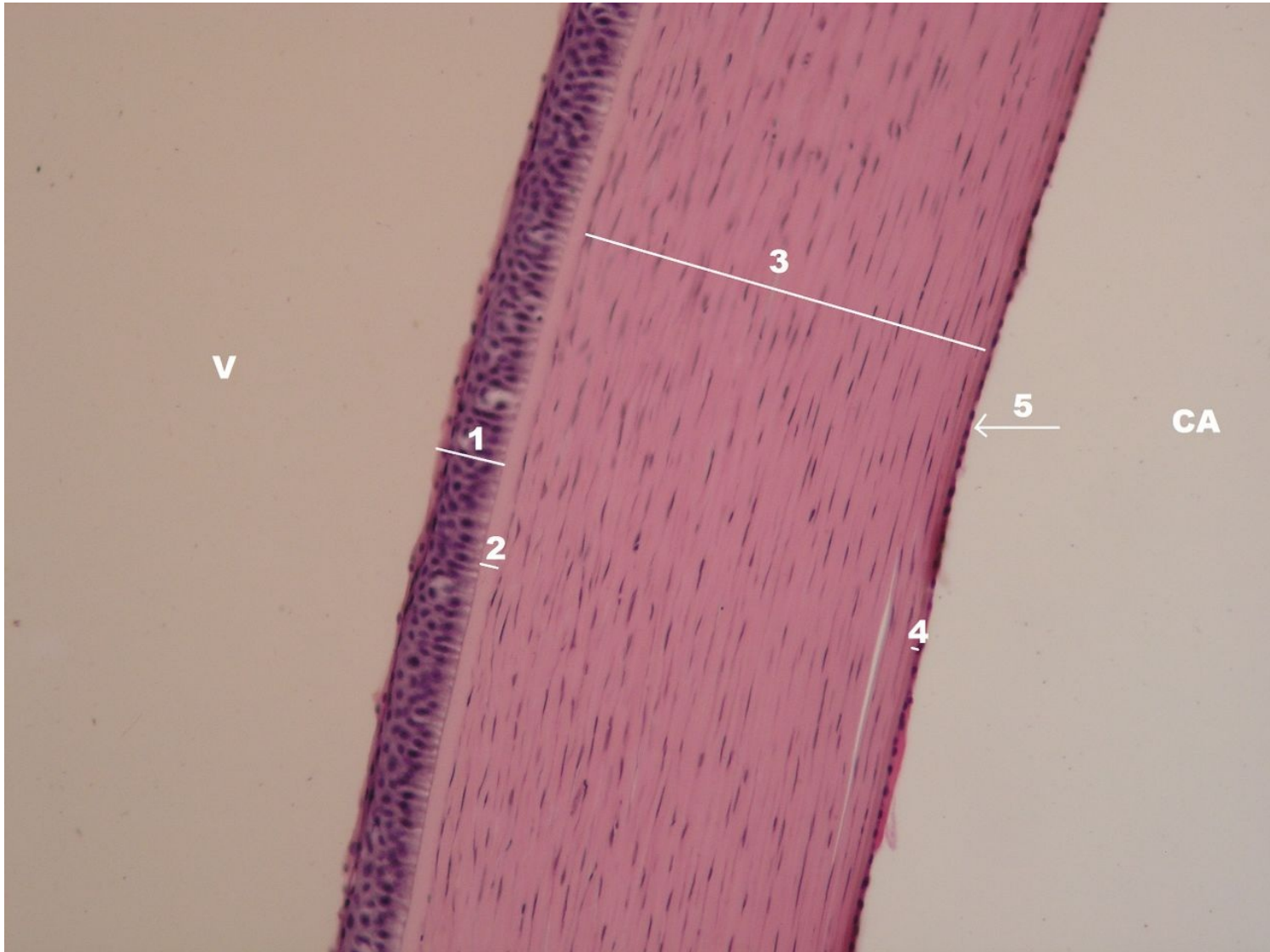


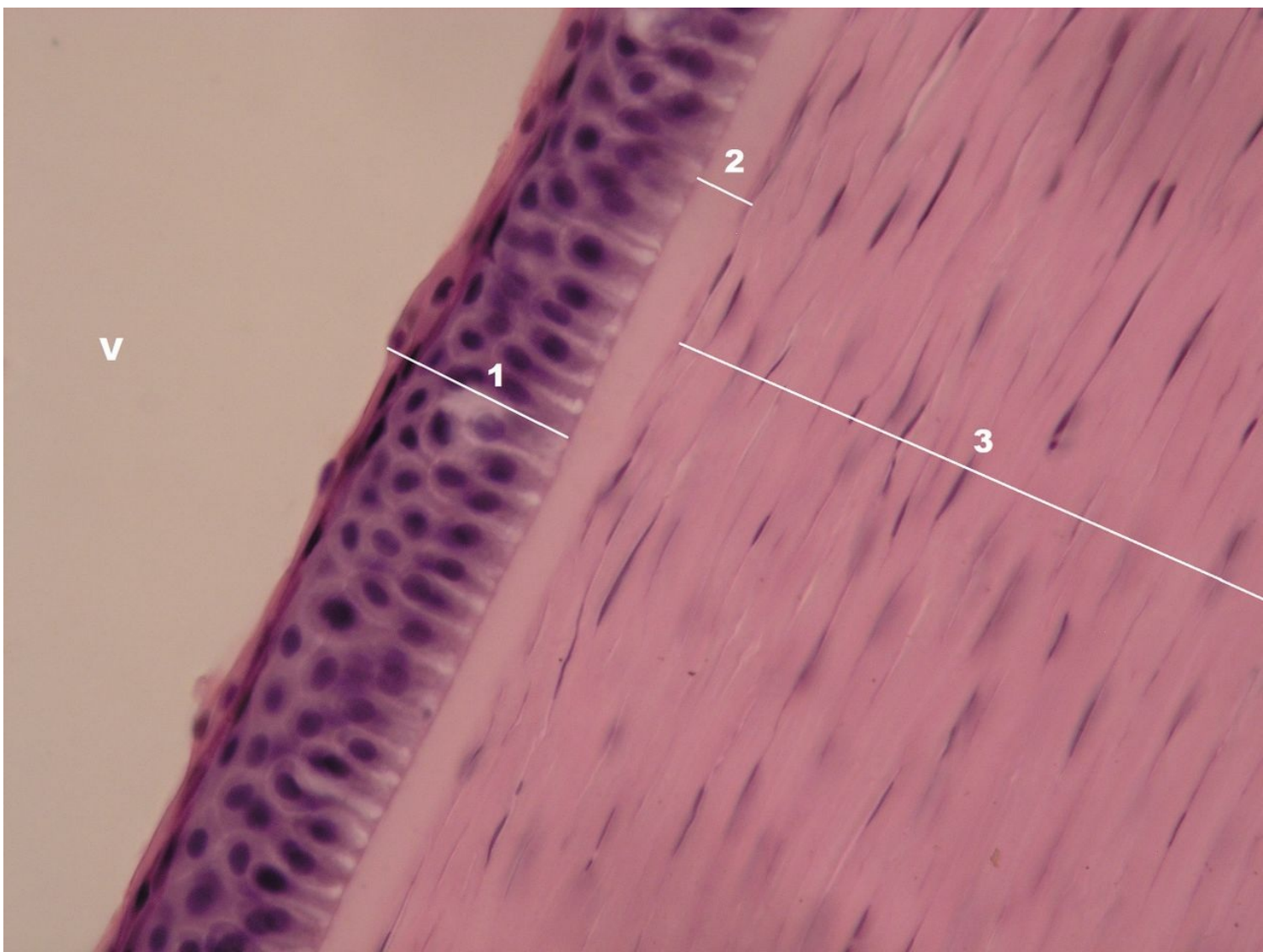
## Bulbus oculi (SFLT)

### Cornea - Overview (HE)



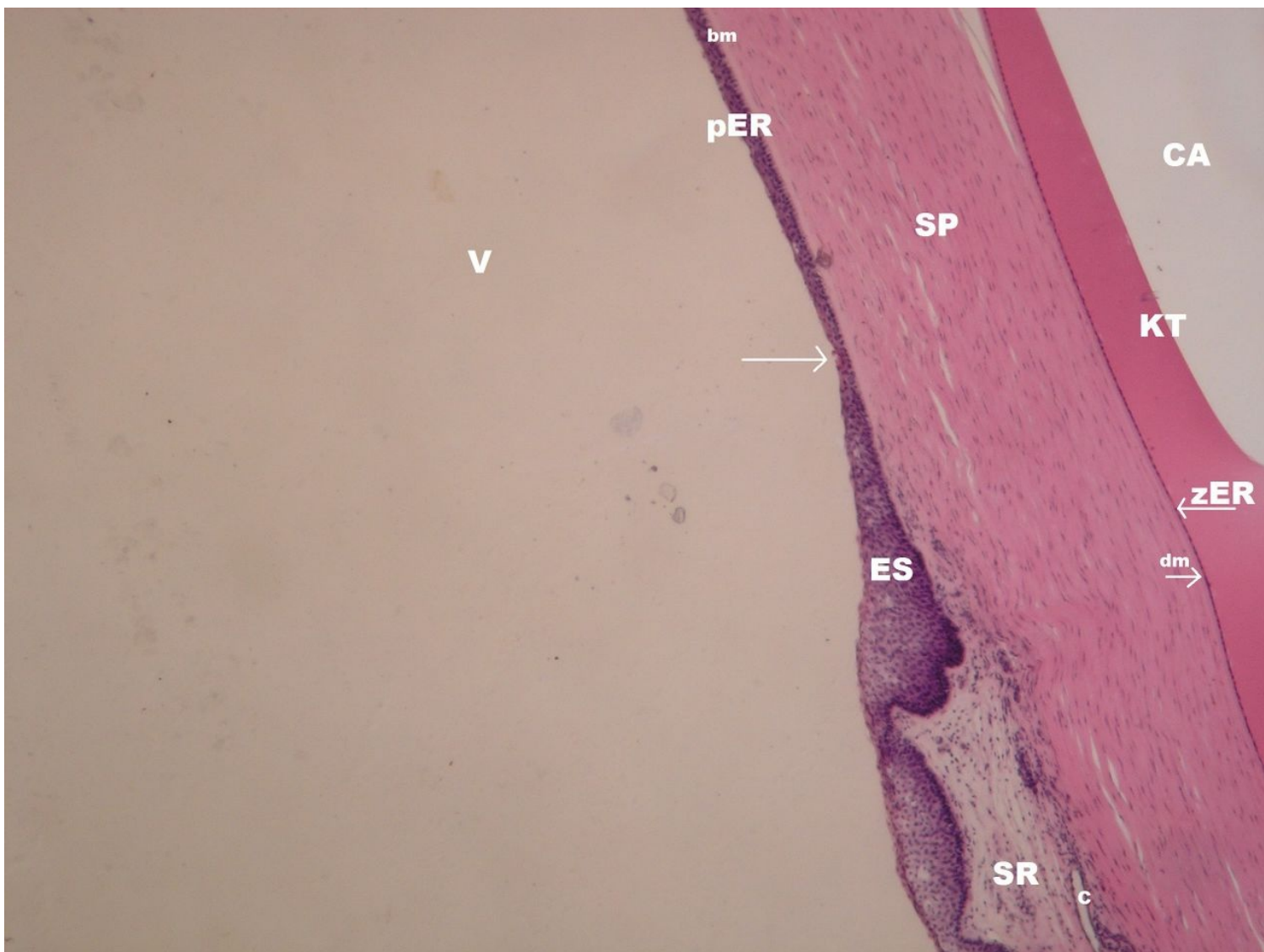
**Description:** 1 – epithelium antierius (multilayer squamous non-keratinous epithelium – 6 layers), 2 – membrana limitans anterior Bowmani, 3 – substantia propria, 4 – membrana limitans posterior Descemeti, 5 – epithelium posterius (single-layer flat epithelium) , V – air, CA – camera anterior (front eye chamber filled with ventricular fluid).

### Cornea - detail (HE)



**Description:** 1 – anterior epithelium (multi-layered squamous non-keratinizing epithelium – 6 layers), 2 – membrana limitans anterior Bowmani, 3 – substantia propria represents 90% of the thickness of the cornea (it is formed by collagen fibrils), proteoglycans, water and fibroblasts-keratocytes), V – air.

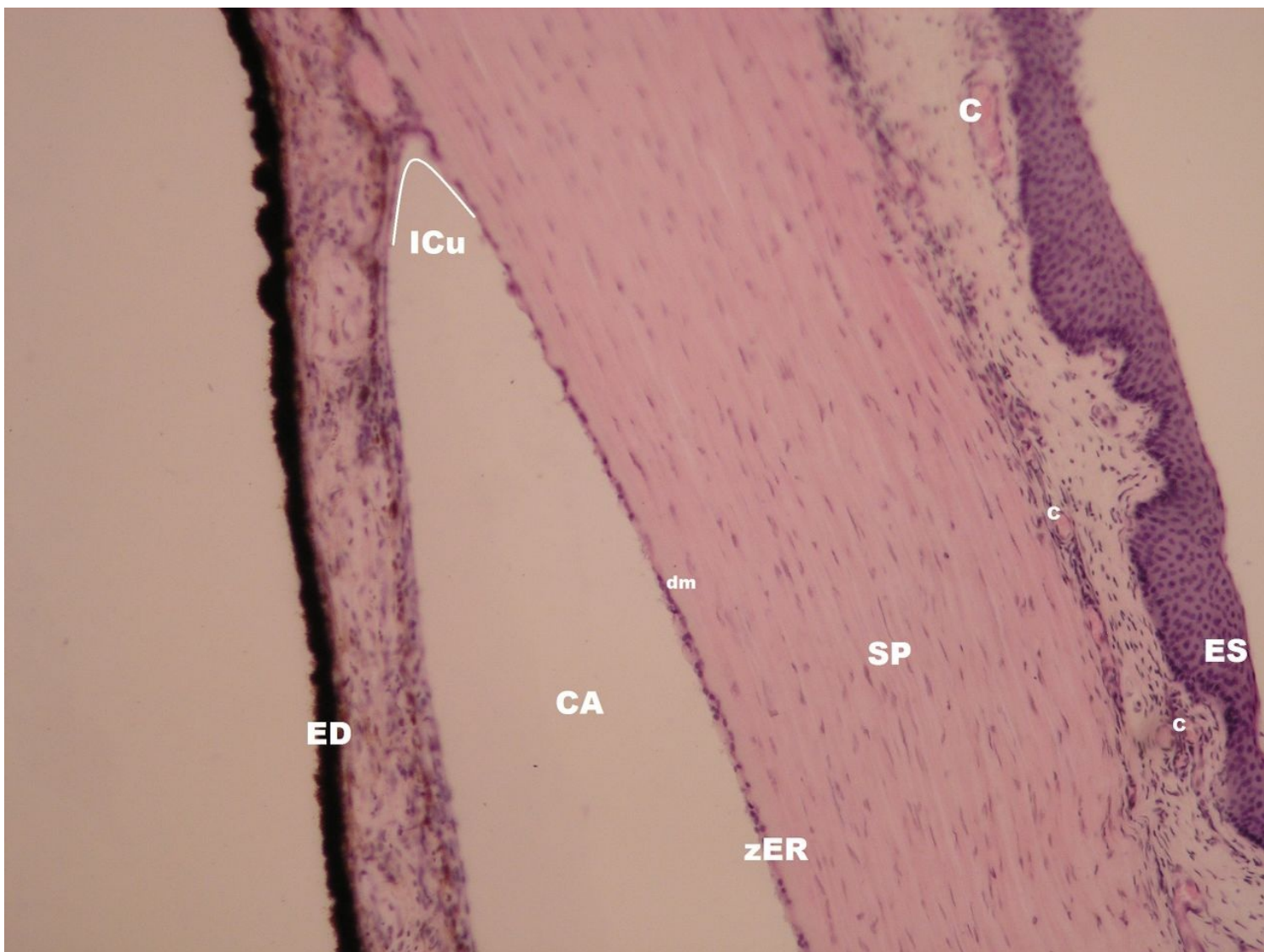
### Corneal Conjunctival Transition (HE)



**Description:** ES - conjunctival epithelium (multilayered cylindrical) is a continuation of the pER corneal epithelium, SR - corneal stroma is a thin tissue containing immune cells, mast cells and numerous blood vessels that form a blood network around the limbus, c - vessel, pER - anterior epithelium of the cornea (multilayer squamous epithelium non-keratinizing - 6 layers), bm - Bowman's membrane, SP - substantia propria of the cornea, dm - Descemet's membrane, zER - posterior epithelium of the cornea (single-layered epithelium flat), V - air, CA - camera anterior (front eye chamber), KT - chamber fluid, arrow - transition of the cornea in the conjunctiva.

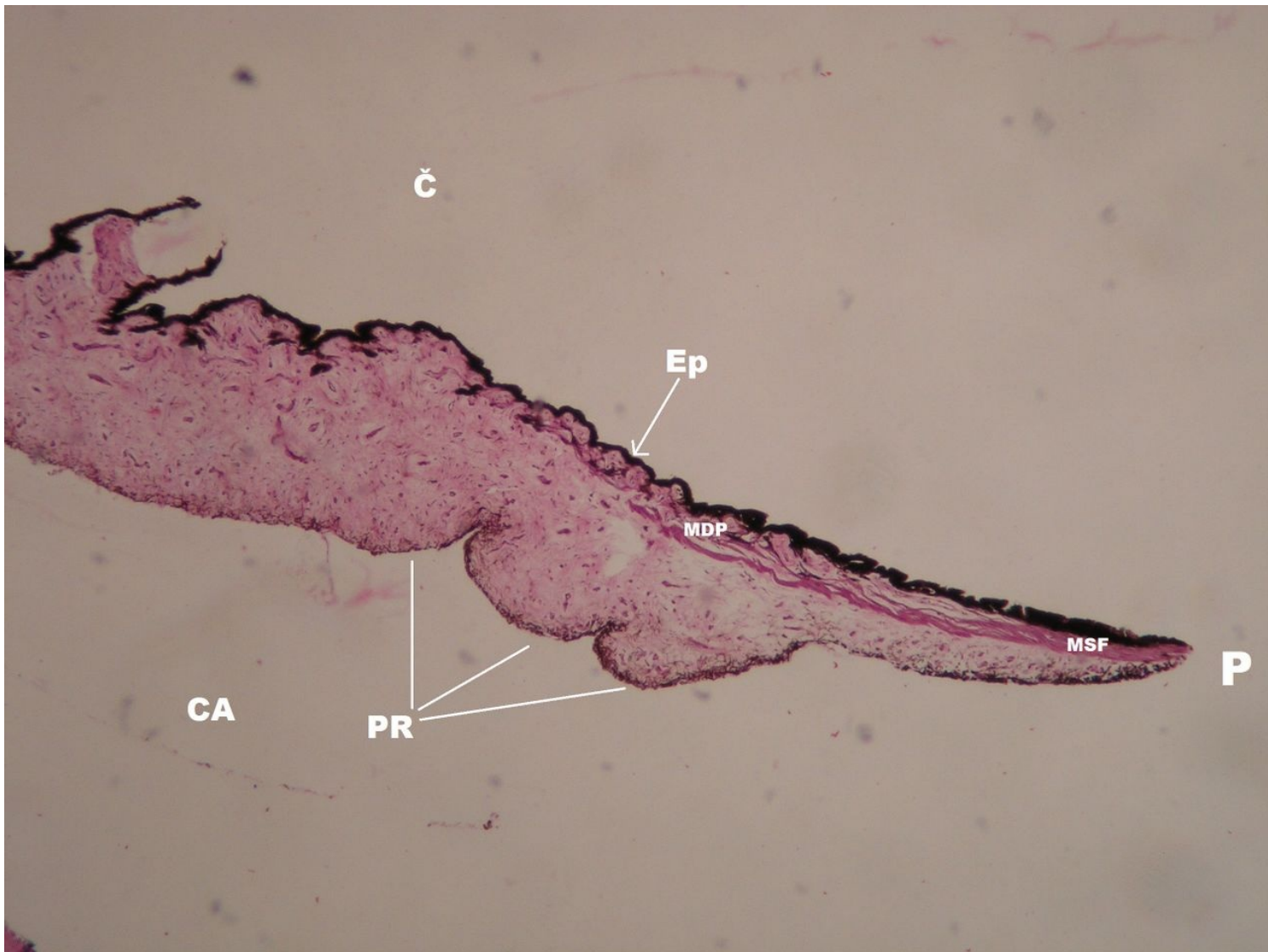
### Iridocorneal angle - iris-cornea junction (HE)





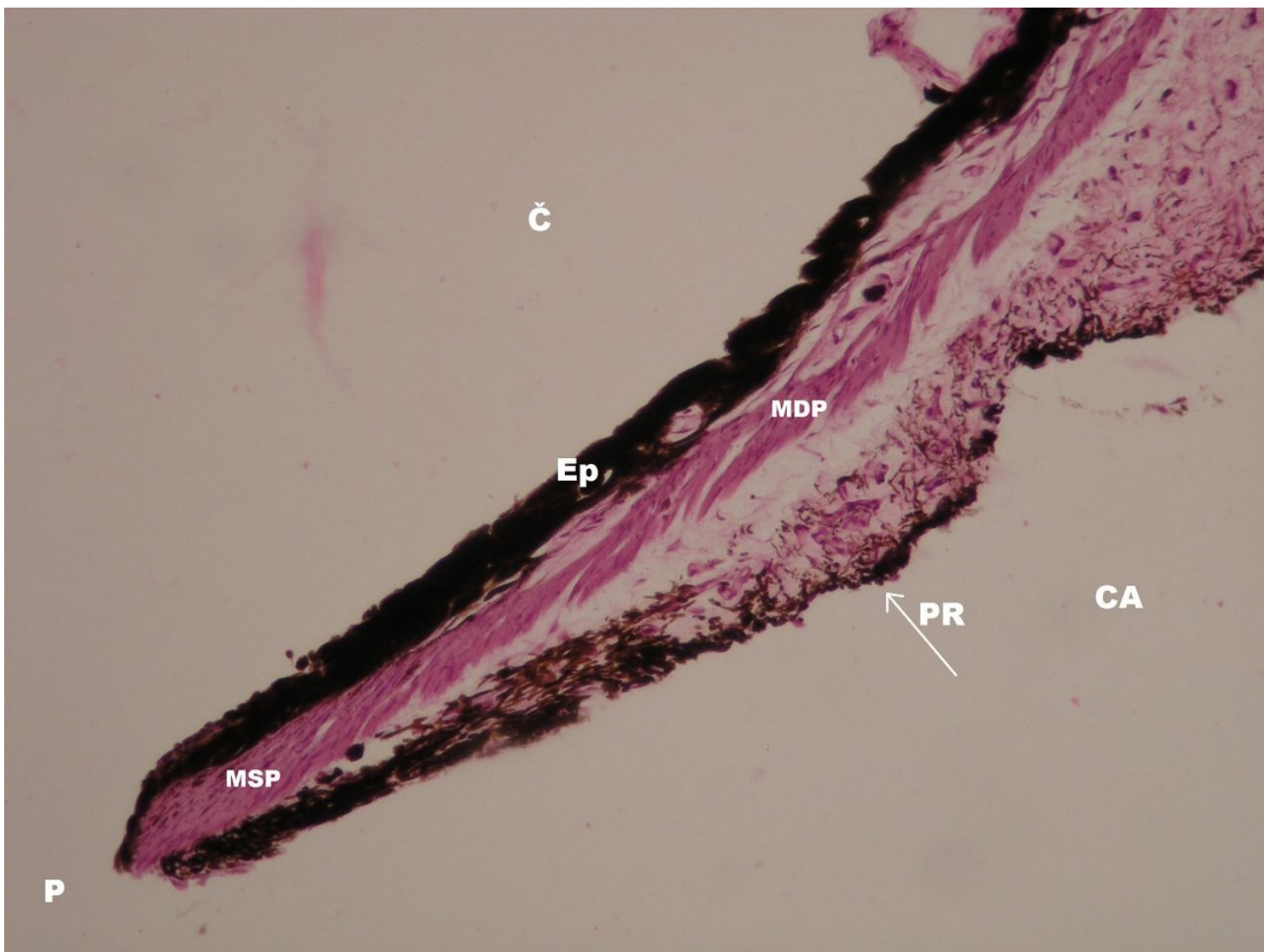
**Description:** ES - conjunctival epithelium (multilayered cylindrical) is a continuation of the corneal epithelium, c - blood vessels, SP - corneal substantia propria, dm - Descemet's membrane, zER - posterior corneal epithelium (single-layered flat epithelium), ICu - iridocorneal angle (iris-corneal), ED - iris epithelium (double-layered, both layers are pigmented), CA - camera anterior (front chamber of the eye)

## Iris - Overview (HE)



**Description:** Ep – iris epithelium (two-layer pigmented), MSP – musculus sphincter pupillae, MDP – musculus dilator pupillae, PR – plica radians, P – pupilla (pupil), CA – anterior chamber, C – side iris facing the lens.

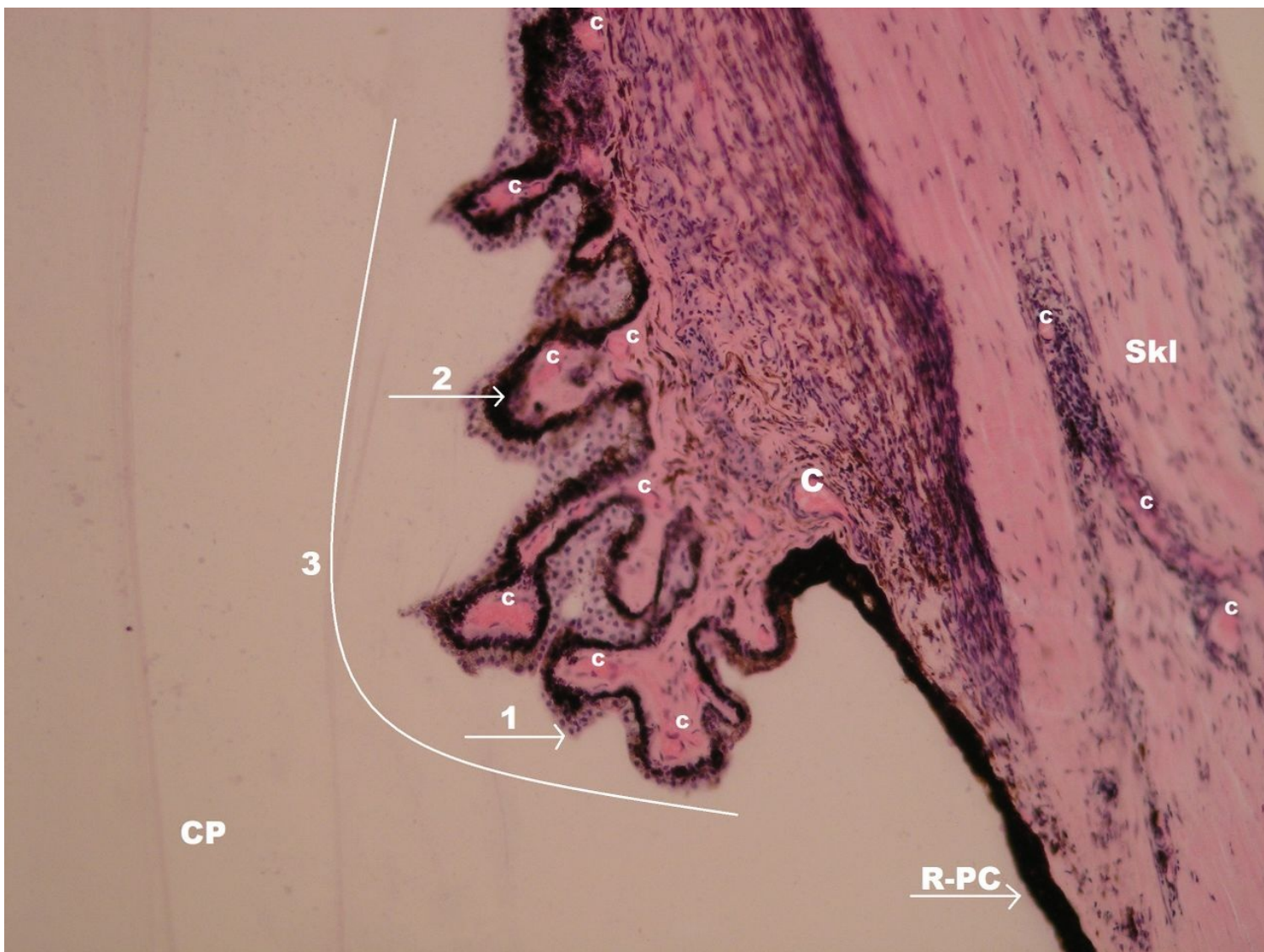
### Iris - detail (HE)



**Description:** Ep - iris epithelium (two-layer pigmented), MSP - musculus sphincter pupillae, MDP - musculus dilator pupillae, PR - plica radialis, P - pupilla (pupil), CA - anterior chamber, C - side iris facing the lens.

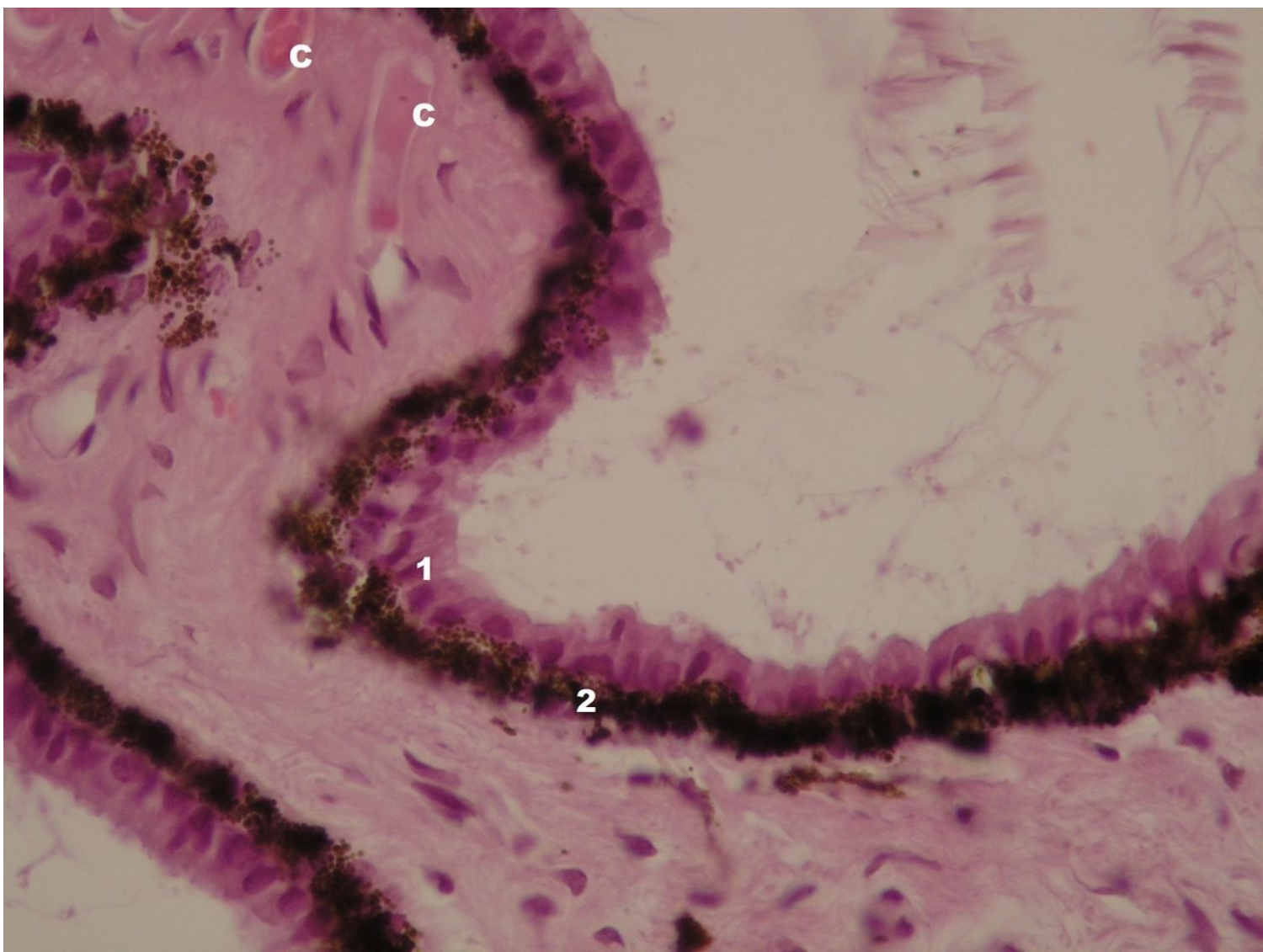
### Ciliary Body - Overview (HE)





**Description:** 1 - the outer layer of the epithelium of the ciliary body, 2 - the inner layer of the epithelium of the ciliary body, 3 - the pars plicata of the ciliary body forms the aqueous humor, C - the vessels/capillaries of the ciliary body have fenestrations, CP - camera posterior (back eye chamber), Glass - sclera (white), R-PC - retina pars caeca.

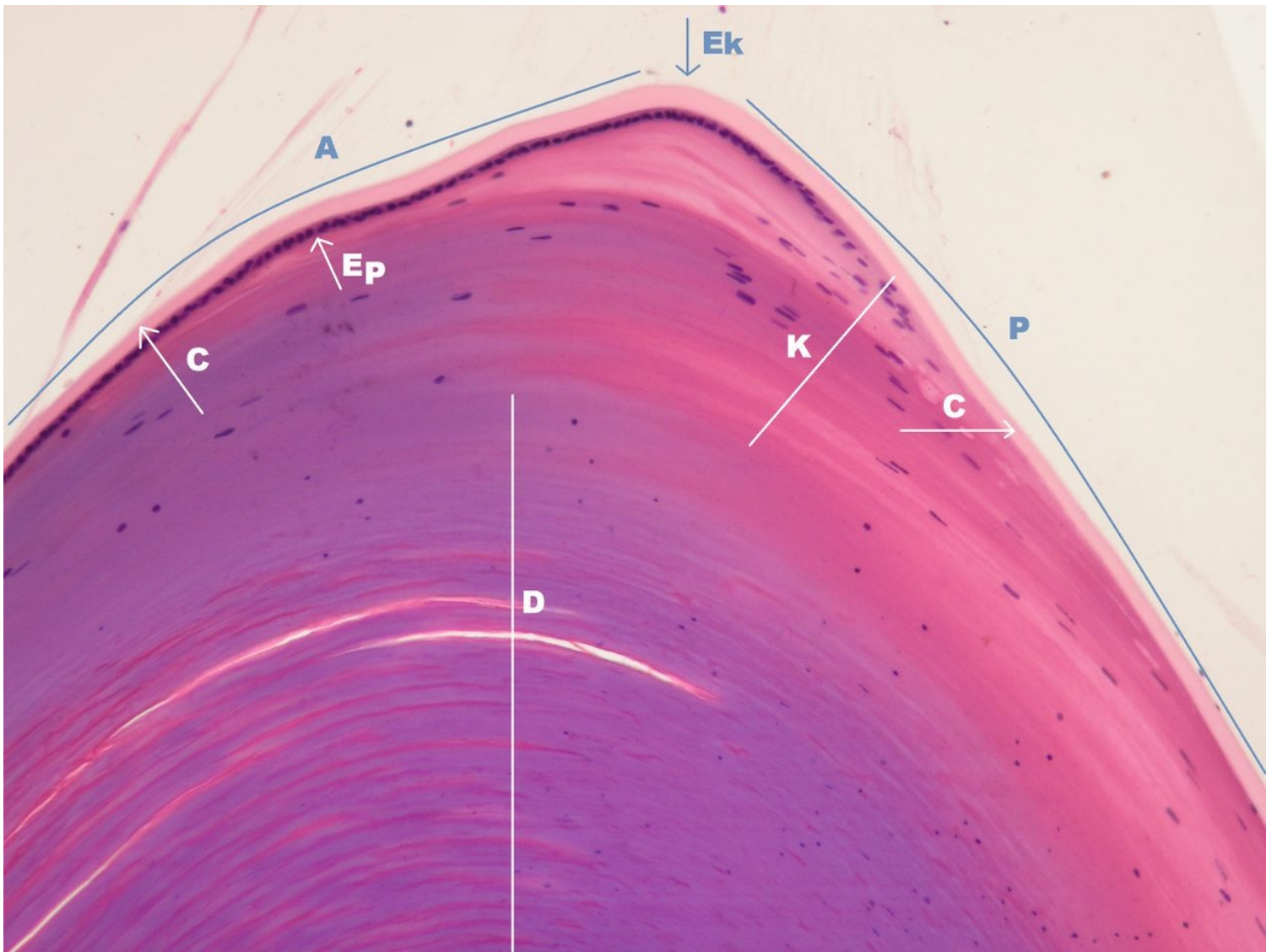
### Ciliated body - detail (HE)



**Description:** 1 - outer layer of the epithelium of the ciliary body, 2 - inner layer of the epithelium of the ciliary body, C - blood vessels.

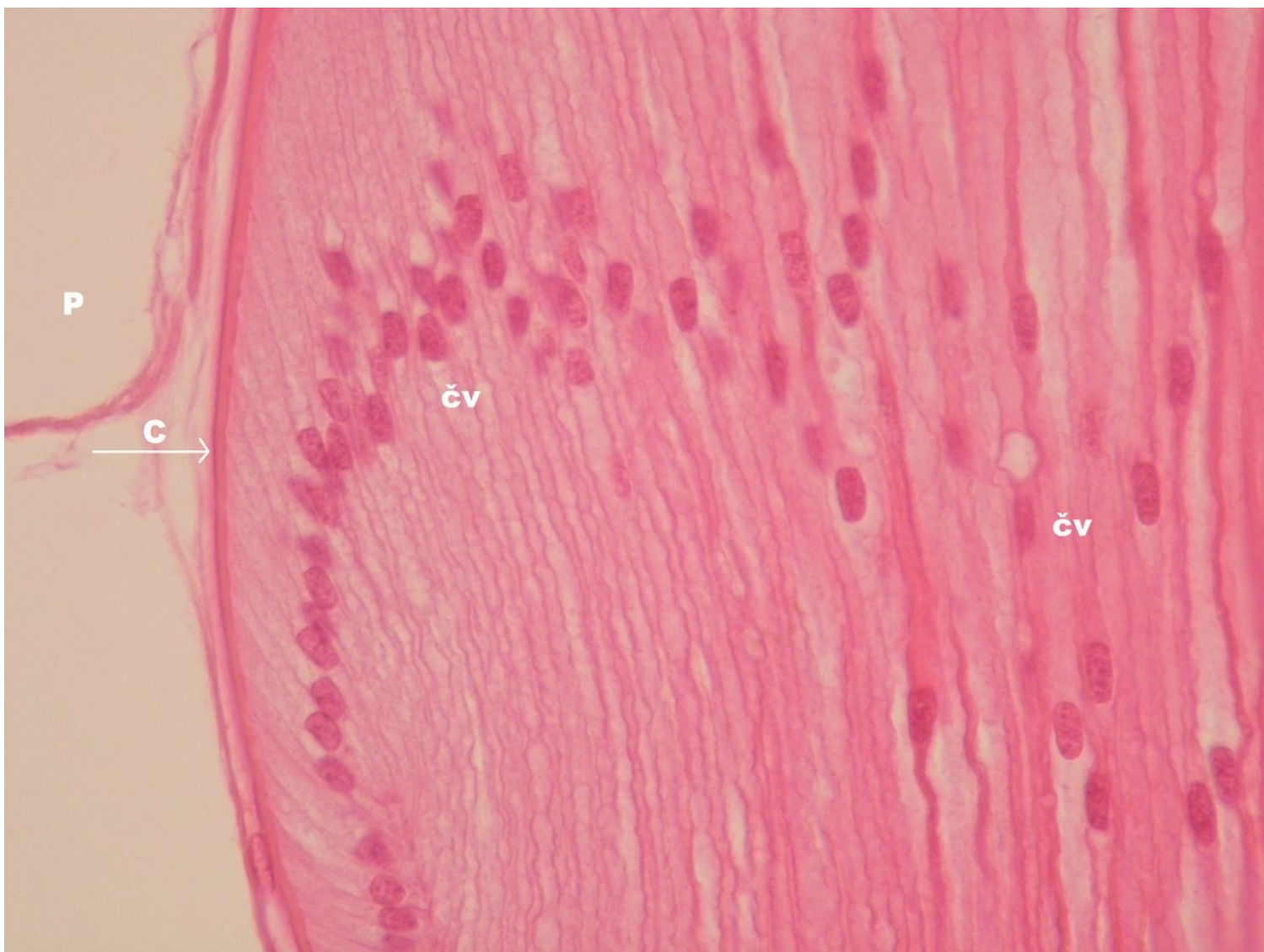
**Lens - sagittal section overview (HE)**





**Description:** the anterior surface of the lens (A) and the posterior surface of the lens (P) meet at the equator (Ek), C - capsule (lens capsule originating from the basal lamina of the ectoderm), Ep - the epithelium is only on the anterior surface of the lens (monolayer cubic to cylindrical towards the equator), K - cortex of the lens (contains younger lens fibers), D - medulla of the lens (contains older fibers).

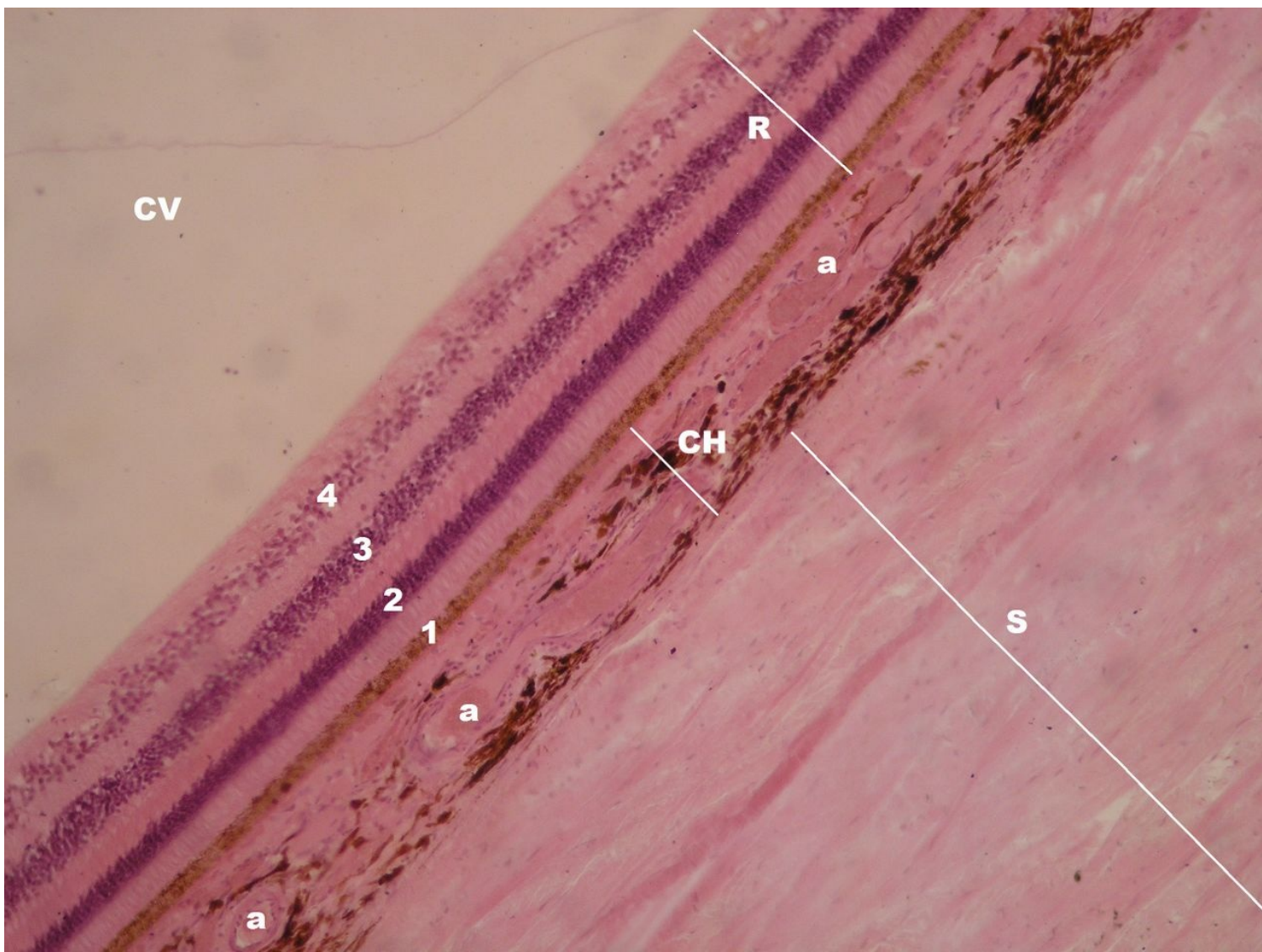
## Lens - detail (HE)



**Description:** P - rear surface of the lens, C - capsule (lens case), cv - lens fibers newly formed from cells that still contain nuclei.

## Retina - Overview (HE)

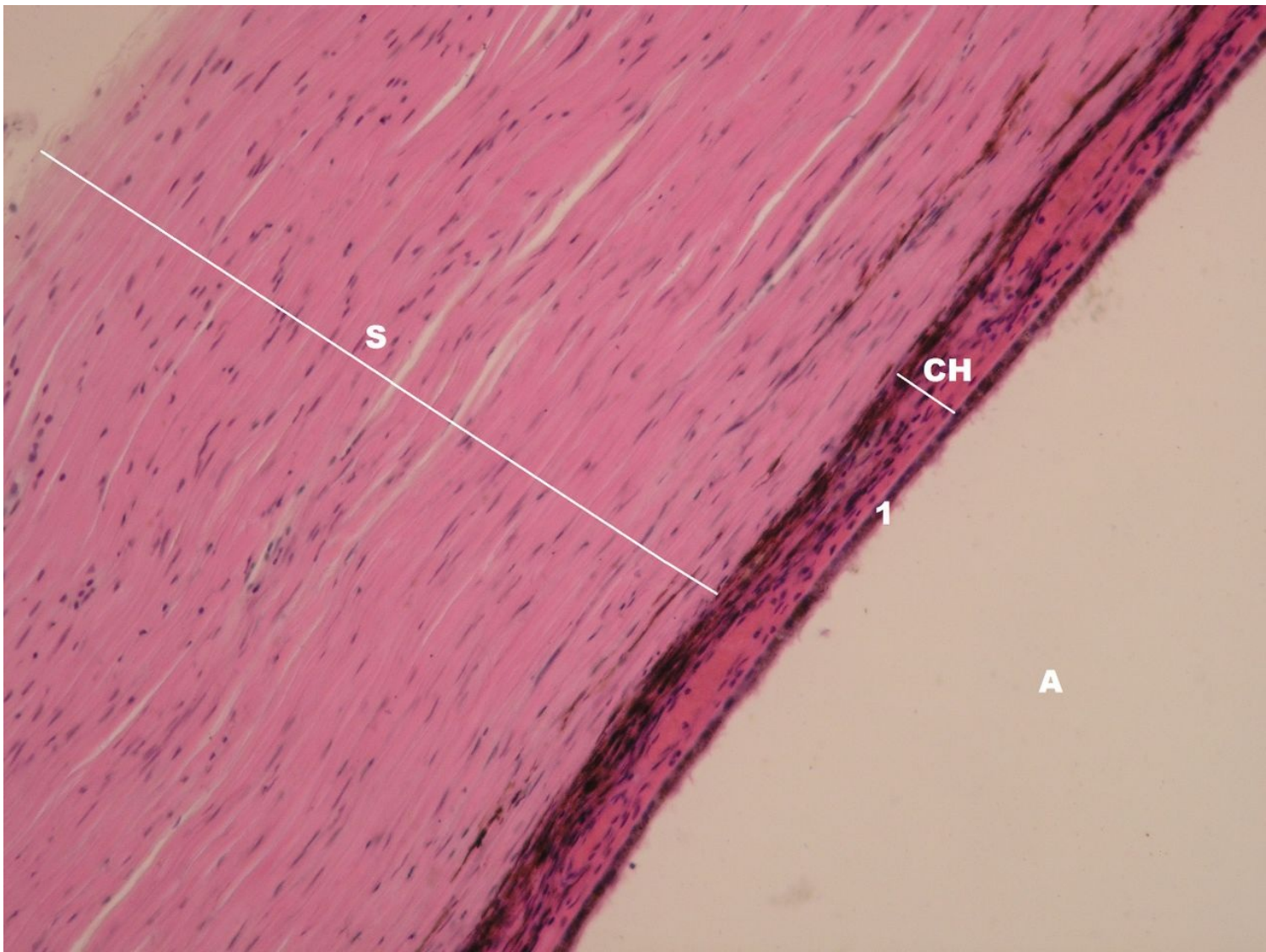




**Description:** 1 – stratum pigmentosum retinae, 2 – layer of nuclei corresponding to rods and cones, 3 – layer of nuclei of bipolar cells, 4 – layer of nuclei of ganglion cells, 5 – layer of axons of ganglion cells, CV – corpus vitreum (vitreous ), R – retina, CH – choroid (choroid), A – arterioles, S – sclera (white blood cells).

## Layers of the eyeball (HE)





**Description:** 1 – stratum pigmentosum retinae, CH – choroid (choroid), S – sclera (whites), A – retinal detachment is common in this location (retinal detachment is a common phenomenon in histological specimens).

## Sense Organs

- Pars olfactoria mucosae nasi (SFLT)
- Organum vestibulocochleare (SFLT)
- Bulbus oculi (SFLT)
- Optic Nerve (SFLT)
- Muscle spindle (SFLT)

## Links

- [Histological atlas \(3. LF UK\)](#)