

Diploma in Pharmacy 1st Year

Human Anatomy & Physiology Practical

To study the given model of skin anatomy.

Aim:

To study the given model of skin anatomy.

Reference :

Dr. Gupta G.D , Dr. Sharma Shailesh , Dr. Sharma Rahul Kumar ,
“Practical Manual of Human Anatomy and Physiology” Published by Nirali
Prakashan , Pg.No 169 - 170

Theory :

The sensory terminals of peripheral nerves are connected with general sensations such as muscular sensations and heat, cold, pain, and pressure sensors, among others. These nerves may terminate in tissue elements or in a unique end organ with mineral nerve filaments enclosed in capsules.

- 1) Free Nerve Ending: These are the nerve endings that penetrate the skin's epidermis. These nerve endings can also be found in the striated squamous epithelium of the corner, as well as in the roof sheath and papilla of hairs, and in the bodies of sebaceous gland tactile discs (merkel's discs are an example of such nerve endings).
- 2) Special End Organs: The specific end organs show a wide range of sizes and shapes, but they all have one thing in common, i.e., the terminal nerve fibrillae are enclosed in a capsule. Krause bulbs are an example of unique end organs.

End Bulbs of Krause

Krause's end bulbs are susceptible to cold. These are small cylindrical or oval structures with a soft semi-fluid core and a capsule generated by the expansion of a connective tissue sheath or a medullated fibre. The skin cylinder ending or mass krouse bulbs are present in the conjunctiva of the eye, the mucous membrane of the lips, and the tongue in this core.

Pacinian Corpuscles

The Pacinian corpuscles, which are sensitive to pressure change and vibration, are found in the cutaneous tissue on the nerve of the palm of the hand and sole of the foot, as well as in both sexes' genital organs. They are also linked to the nerves that control the joints.

Corpuscles of Golgi and Mazzoni

The Golgi and Mazzoni corpuscles are present in the subcutaneous tissue of the finger. They differ from Pacinian corpuscles in that their corpuscles are thinner, their contained lamellae are thicker, and the axis cylinders ramify more extensively and end in flat expansions in the later

The tactile corpuscles of Wagner-Meissner are oval-shaped bodies and are sensitive to touch. The capsule and impermeable membranes are septate. These tactile corpuscles occur in the papillae of the corium the skin of the lips mucous membrane of the tip of the tongue the palpebral conjunctiva and skin of the mammary papilla

Corpuscles of Ruffini

These are particular nerve endings in the human finger's subcutaneous tissue. They are mainly found at the point where the corium meets the subcutaneous tissue. They have an oval form and are made up of strong connective tissue sheaths within which the nerve fibres divide into multiple branches that are heat sensitive.

Organs of Golgi

These are most commonly located near the junction in a capsule that has a number of larger tendon fasciculi as well as more nerve fibre perforate. The axis cylinder subdivides and between the tendon fibres in normal discs, and the side of the capsule and lose their medullary sheath.

Result:

The gross anatomy of skin with the help of model and chart was studied.