

Anatomy & Physiology

What body system allows the client to feel sensation during the micro-dermabrasion treatment?

The sympathetic nervous system.

What effect does the micro-dermabrasion treatment have on the epidermis, and dermis

- a) Changes to the epidermis will be the most visible as it is the outer layer. Due to new cell formation the epidermis will become thicker and plumper in look. Due to the disruption caused, the epidermis may appear dry for the next few days after the practice.
- b) To the dermis layer the collagen fibers increase in number and become thicker. Similarly, elastic fibers become oriented vertically instead of the normal horizontal layout.

Complete the following table:

Gland	What are they?	Where are they located and what do they secrete?	How do they affect the skin?
Sweat glands	Also called sudoriferous or sudoriparous glands are small exocrine that secrete sweat.	.In the dermis	They release sweat which cools down the temperature of the skin during hot times. Similarly, they make the skin moist.
Sebaceous glands	A microscopic gland that secretes sebum	In the epidermis underneath the hair follicle	Sebum released by sebaceous glands makes the skin oily and water proof. This causes the skin to prevent transepidermal water loss.

What changes would you expect to see on the skin for an individual going through puberty including skin type? Why would this occur?

Acne starts to appear

Pimples appear.

The skin becomes more sensitive to products.

This is because the body secretes more hormones during the puberty stage which affect the individual's skin. Their skin is premature.

What changes would you expect to see on the skin for an individual going through menopause including skin type? Why would this occur?

During Menopause the skin becomes more dry and thin hair. This is caused by depletion of estrogen. Their skin is aged.

What is the difference between aged skin and prematurely aged skin in regards to appearance and anatomical differences (compare this to a normal skin)?

Aged skin is rougher than premature skin.

The loss of elastic tissues causes aged skin to hang loosely as compared to premature skin which is intact.

Anatomically, aged skin loses cartilages and fatty layers.

Research and outline information in regards to the following body systems and their relationship to skin functions and influences:

N/A

What occurs during trauma to the skin in regards to wound healing:
outline the stages and how is collagen deposition affected?

- a) The first step is clotting which serves as a protection from blood loss. Hence creating a temporary barrier.
- b) The second step involves the red blood cells making their way to the wound to be able to fight infections that might have penetrated.
- c) The second phase is where the fibroblast cells deposit collagen in the wound to initiate the process of knitting the skin together.
- d) Finally, the dermis and epidermis connect and contract to close the wound.