KELOID AND HYPERTROPHIC SCAR

Keloids are overgrowths of dermal scar tissue. A characteristic site in the head and neck area is the earlobe where they are formed by trauma and infection associated with the wearing of earrings. Keloids are most common in the black race. At first, collagen forms in reticular dermis with numerous capillaries and fibroblasts, but later capillaries and fibroblasts decrease and very eosinophilic collagen predominates appearing as thick wavy strands of hyalinized bundles. Normal skin structures such as sweat glands, sebaceous glands and hair follicles are replaced. The overlying epidermis may be atrophic, depending on how closely the keloid approaches it.

Hypertrophic scars may look like keloids histologically but usually they do not go on to show the striking hyalinization seen in keloids and there are more cells in the mature fibrous tissue.

Hypertrophic scars tend to flatten out with time whereas keloids never regress completely. Hypertrophic scars do show a predilection for the black race. The thick wavy bundles of collagen seen in keloids ordinarily are not present in hypertrophic scars.

Keloid: epidermis and upper dermis appear normal, but in deeper dermis there are broad, hyalinized bands of collagen (arrow) thicker than the normal dermal collagen. Melanin (triangle) is seen in the basal layer of the epidermis.
Keloid with unusually large, active-looking fibroblasts.

Keloid, earlobe. Several blood vessels and broad bands of wavy collagen with plump but inactive looking nuclei (arrow). BV blood vessel.
Clinical Aspects

Keloids may be painful, they itch, and are unsightly. Surgical removal may result in another keloid but repeated injection of steroids into the healing site tends to prevent their reformation.