Arrector pili and piloleiomyoma

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Omaha
1. Epidermis
2. Hair
3. Sebaceous gland
4. Sweat gland
5. Arrector pili muscle
6. Subcutis
Arrector pilorum (A P)

Arrector pili is a bundle of smooth muscle fibers which attaches the hair follicle unit to the upper dermis. Contraction of these muscles causes the hairs to stand on end (goose bumps or hair-raising experience). It is innervated by the sympathetic nerves. The muscle contraction is involuntary. Stresses such as cold, fear etc. may initiate such contraction.

Benign neoplasm arising from arrector pili is called a piloleiomyoma (benign tumor from pilar smooth muscle).
M 42, left upper arm: Piloleiomyoma

Dermal pink mass composed of whorls of smooth muscle, positive for SMA.
Piloleiomyoma is a benign neoplasm arising from the arrector pili in the skin. It occurs in young adults of both genders. Lesions can be single or multiple and more frequently involve extremities. Pain may occur spontaneously or after physical stimulation.

Cutaneous leiomyomas are three types:
1. Piloleiomyomas from the arrector pili muscle of the pilosebaceous apparatus.
2. Angioleiomyomas from the smooth muscle walls of arteries and veins.
3. Genital leiomyomas from the dartos muscle of the scrotum and the labia majora, as well as those from the dermal smooth muscle of the nipple.