

tion of the surrounding bone (Harris; Bissell and Brunschwig). Upon surgical enucleation, superficial lesions appear to be surrounded by a well developed fibrous capsule, which is lined on the inside either entirely or partially by a smooth, white membrane. Granular tissue may cover the remainder of the cystic wall. A serous, viscous material or a cheesy, scaly or lamellated, horny matter form the content of the traumatic epithelial cysts.

VIII. HISTOLOGY

A fibrous capsule is lined by a stratified and cornified squamous epithelium which in turn is covered by a laminated keratin. There are no glandular organs or hair follicles included in the epithelial coating in contrast to the anatomical composition of sebaceous gland cysts and dermoids. Parts of the cystic wall may be composed of a chronic inflammatory granulation tissue containing foreign body giant cells.

IX. CAUSATIVE MECHANISM

The traumatic origin of these formations is based upon the circumstantial evidence presented by the traumatic history, the peculiar local distribution, the preference for certain occupations, the age distribution and the histological structure. The traumatic causation of these lesions is supported by the results of experimental subcutaneous implantations of epidermis into the subcutaneous tissue of animals. Kauffmann implanted pieces of the epidermis into the subcutaneous tissue of the combs of roosters and chickens, and obtained epithelial cysts surrounded by a granulation tissue containing giant cells. Similar results were reported by Ribbert, who produced epithelial cysts in the subcutaneous tissue of rabbits by epidermal implants. Manasse and Schweniger, who made similar experiments, emphasized that the implanted epidermis did not need to be connected with blood vessels to remain vital and for forming the epithelial cysts. Peer and Paddock observed that cystic cavities, lined by epidermis and containing horny material and fragments of hairs, appeared in deeply implanted dermal grafts. While the sebaceous glands, hair follicles and sweat glands regressed in the grafted tissue after some time, the epidermal tissue was surrounded at the same time by a granulation tissue containing foreign body giant cells, epithelioid cells, etc. Epidermal cysts were produced in rats by the transplantation of skin flaps beneath the skin (Burckhardt and Müller).

Whereas these observations support the traumatic implantation theory of the genesis of traumatic epithelial cysts, Pels-Leusden offered experimental evidence suggesting that these cysts may originate from the epithelization of traumatic subcutaneous cavities formed by a liquefaction necrosis from the proliferating epithelium of the epidermal appendiceal organs. This investigator placed small magnesium plates under the skin of rabbits and found that an epidermization of the cystic cavity formed around the foreign body