Cysts

A cyst is a benign, round, dome-shaped encapsulated lesion that contains fluid or semi-fluid material. It may be firm or fluctuant and often distends the overlying skin. There are several types of cyst. The most common are described here.

Pseudocyst?

Cysts that are not surrounded by a capsule are better known as pseudocysts. These commonly arise in acne.

Cysts

Epidermoid cysts are due to the proliferation of epidermal cells within the dermis. So basically the layers of skin that are supposed to be on the outside instead invaginate in. Skin is tucked in to form a sack that is lined by healthy epidermal cells that continue to multiply, mature and form keratin. These can be found just about anywhere on the body. A central pore or punctum may be present. Keratinous contents are soft, cheese-like and malodorous.

The origin of a trichilemmal cyst is hair root sheath and, thus, these are often found on the scalp and are very firm. Inheritance is autosomal dominant.

The origin of steatocystoma is the sebaceous duct within the hair follicle. A solitary steatocystoma is known as steatocystoma simplex. More often, there are multiple lesions (steatocystoma multiplex) on the chest, upper arms, axillae, neck and scrotum or vulva and this is usually an autosomal dominantly inherited disorder. The cysts arise in the late teens and 20s due to the effect of androgens and persist lifelong. They are freely moveable, smooth flesh to yellow color papules 3–30 mm in diameter. There is no central punctum. The content of the cysts is predominantly sebum.

The origin of the eruptive vellus hair cyst is follicular infundibulum. It may be inherited as an autosomal dominant disorder due to mutations in the keratin gene.

A dermoid cyst is a hamartoma, a developmental error. A cutaneous dermoid cyst may include skin, skin structures and sometimes teeth, cartilage and bone. Most dermoid cysts are found on

face, neck, scalp; often around eyelid, forehead and brow. It is a thin-walled tumour that ranges from soft to hard in consistency. The cyst is formed at birth, but the patient may not present until an adult.

The origin of a ganglion cyst is degeneration of the mucoid connective tissue of a joint.

Occlusion of the orifice of a mucous gland can lead to a fluid-filled cyst in a mucous membrane (lip, vulva, vagina).

Occlusion of pilosebaceous units (hair follicles) or eccrine sweat ducts leads to a build-up of secretions, which can present as milia. A milium is a pseudocyst due to failure to release keratin from an adnexal structure. The origin of primary milium is infundibulum of the vellus hair follicle at the level of the sebaceous gland and is a miniature version of an epidermoid cyst. The source of secondary milium is a retention cyst within a vellus hair follicle, sebaceous duct, sweat duct or epidermis.

Digital mucous cysts arise in older adults on the finger near a joint. They can be associated with osteoarthritis.

Hidrocystoma is a translucent jelly-like cyst arising on an eyelid.

What is the treatment for cysts?

Asymptomatic epidermoid cysts do not need to be treated. In most cases, an attempt to remove only the contents of a cyst is followed by recurrence. If desired, cysts may be entirely excised. Recurrence is not uncommon, and re-excision may be surgically challenging.

Inflamed cysts are sometimes treated with:

Incision and drainage

Intralesional injection with triamcinolone

Oral antibiotics

Delayed excision biopsy

How can cysts be prevented?

Unknown.

What is the outlook for cysts?

Cysts generally persist unless surgically removed.