ABC of Dermatology

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PROCEDURES

Skin biopsy

Many common conditions can successfully be dealt with by simple techniques which, once acquired, can easily be used in general practice. In this article several of the most useful are discussed.

Skin biopsy is used to establish a diagnosis (incisional) or to remove a lesion (excisional). In both cases the incision should be elliptical and should run parallel to the skin wrinkle lines.

As a rule of thumb the long axis of the wound should be about three times as long as its short axis. The apical angle should be no more than 30°.

Procedure

- (1) Explain the procedure to the patient, warning about the scar that will result from it. This may be slight on the face but more prominent in areas susceptible to keloid formation, such as the sternum, shoulders, and upper outer arms.
- (2) Establish that the patient is not allergic to local anaesthetics.
- (3) Obtain consent.
- (4) Mark out the planned incision with sterile gentian violet before injecting the local anaesthetic.
- (5) Anaesthetise with 1-2% plain lignocaine. Lignocaine-adrenaline combinations, though they help to reduce bleeding, should not be used on the extremities. The mild discomfort of the injection may be lessened by injecting very slowly and avoiding lignocaine-adrenaline mixtures.
- (6) A number 15 blade is used, cutting at 90° to the skin surface. Wedge shaped incisions heal poorly, as illustrated.
- (7) A skin hook may be used to lift one end of the specimen to release its underside. Forceps crush specimens and cause pathological artefacts.
- (8) Removal of sutures—from the face at 4-5 days, from the trunk at 7 days, and from the leg at 10 days.
- (9) Elevation and compression bandaging are advisable when removing lesions from the lower leg.

Clinical.

Surgical.

Histopathological.

Curettage

Seborrhoeic keratosis.

Actinic keratosis.

Incisional biopsy—Always include the boundary of the normal-abnormal area in an incisional biopsy specimen, which must be at least 1 cm long and deep enough to include subcutaneous tissue.

Excisional biopsy—There are several points to remember when removing a lesion.

(1) Allow for an adequate zone of clearance, especially when excising pigmented or neoplastic lesions. A 2·5-5 mm margin is usually sufficient. Partial removal must be avoided.

(2) Place specimens, dermal side down, on a small square of filter paper, to avoid curling, and then immerse them in formalin.

(3) Mark clearly on the specimen container the patient's name and the date of biopsy.

(4) Record on the pathology form the site of biopsy, a description of the lesion and a note of its duration, the clinical history, and the clinical diagnosis.

Curettage is ideal for benign epidermal lesions, such as seborrhoeic and actinic keratoses or viral warts.

If well localised on the face, trunk, and limbs superficial or small nodulocystic basal cell carcinomas may be treated by curettage if they have clearcut borders and a firm base.

Procedure

- (1) Anaesthetise site.
- (2) Stretch the skin on either side of the lesion.
- (3) Apply the lip of the curette to the edge of the lesion, as illustrated.
- (4) Use a rapid downward scooping action, working around the lesion towards its centre.
- (5) Curette down to the dermis, identifiable by its scratchy, sandpaper-like consistency.
- (6) Use light cautery, sweeping across the base of the lesion, and pay particular attention to bleeding points. Necrotic tissue produced by excessive cautery impairs wound healing: simple pressure to control bleeding is preferable to this.
- (7) Repeat the whole procedure if treating a basal cell carcinoma.
- (8) Cover with a dry dressing on the trunk: leave facial lesions exposed. Tell the patient that a scab will form and drop off in about 10 days.

Cryotherapy

Cryotherapy is used increasingly to treat many dermatological conditions in hospital and general practice. Suitable conditions include (a) viral warts and molluscum contagiosum; (b) keratoses, both seborrhoeic and actinic; and (c) biopsy proved Bowen's disease.

A liquid nitrogen spray may be used but equally good results can be obtained with a cottonwool dipstick method. The best results are then achieved by "rolling your own." After immersing the cottonwool bud in liquid nitrogen apply it firmly to the lesion.

Wait until a thin "halo" of frozen tissue has spread 2 mm out from the base of the lesion. Depending on size, this usually takes 5 to 10 seconds. Repeat once if necessary.

Precautions

(1) Take great care with lesions on the faces of children and with pigmented skins. Hypopigmentation and hyperpigmentation can occur.

(2) Treat only if the diagnosis is certain: a confirmatory biopsy may be needed before treatment—as in Bowen's disease.

(3) Warn that a haemorrhagic blister may form at the site within 24 hours. This tendency can be reduced by a single application of a highly potent corticosteroid ointment immediately after treatment. Should a blister form it will remain for several days. If it is painful a sterile needle may be used to burst it and then a dry dressing can be applied.

(4) It may be unwise to treat lesions on both hands or feet at the same visit.

Electrocautery

A heated element is used to coagulate the lesions. As no current passes through the body this is a safe procedure.

Common indications include (a) the removal of benign epidermal pedunculated tumours, such as skin tags; and (b) the destruction of small vascular lesions such as spider naevi. Only lesions that need no histological confirmation should be treated. Other indications for this procedure lie outside the scope of this article. There are two modes of cautery—shave cautery and pinpoint cautery.

Shave cautery is used on skin tags over 1 cm long. The correct attachment is needed. Pick up the skin tag with forceps and slice across the base with the cautery instrument. Local anaesthetic may be required.

Equally well tolerated is touching a skin tag with the needle or ball point tip directly. The lesion mummifies immediately and drops off in 10 days.

Smaller lesions may be simply snapped off.

Pinpoint cautery attachment.

Blanch the lesion to identify feeding vessels. Then insert needle into feeding vessels in the cold state.

Spider naevus.

Pinpoint cautery is used on lesions such as spider naevi. A pinpoint attachment is needed. Locate the feeding vessel by blanching with glass slide. Accurately position the needle element in the cold state into the lesion and apply current for less than 1 second. Warn the patient that a small scab will develop and fall off within 10 days. A local anaesthetic is seldom needed.

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