

## Case 1

### *What are these speckled spots?*

A speckled, pigmented lesion is noticed on the upper arm of a 10-year-old girl. Her mother says the lesion has been present for as long as she can remember and asks if it is dangerous.

#### *What is your diagnosis?*

- a. Congenital nevus
- b. Becker's nevus
- c. Nevus spilus
- d. Café-au-lait macule
- e. Spitz nevus

#### *Answer*

The *nevus spilus* (**Answer C**) is a nevomelanocytic lesion with darkly pigmented macules and/or papules on the background of a larger, circumscribed, tan macule. The nonspeckled tan portion consists of increased numbers of melanocytes and, sometimes, nevus cells.

The speckled macules represent lentiginous melanocytic hyperplasia, while the raised speckles consist of collections of nevus cells in the epidermis and dermis. This lesion is acquired rather than congenital, usually appearing in late infancy to early childhood and most commonly on the trunk and extremities.

The tan macular background ranges from 1 cm to more than 10 cm in diameter.

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For the most part, this lesion is benign and requires no treatment. Any unusual appearing or changing components of the nevus spilus should be biopsied to exclude the rare possibility of melanoma.

#### This month—6 cases:

1. What are these speckled spots?
2. "It spread overnight!"
3. A Noteworthy Nodule
4. "Why is it so itchy?"
5. "Doc, what's on my neck?"
6. Is it diabetes?



## Case 2

### *“It spread overnight!”*

A 60-year-old woman presents with a rash that evolved overnight on her right side, where she had been experiencing sharp, burning pain for the previous two weeks. Examination reveals a vesicular erythematous eruption in a dermatomal distribution on her trunk.

#### *What do you suspect?*

- a. Herpes simplex virus infection
- b. Nummular eczema
- c. Contact dermatitis
- d. Herpes zoster
- e. Erysipelas

#### *Answer*

*Herpes zoster (Answer D)* is an acute vesicular or bullous eruption in a dermatomal distribution associated with reactivation of varicella-zoster virus (VZV). It consists of a prodrome of two to three weeks of unilateral, sharp, lancinating pain, followed by active vesiculation for three to five days and, finally, crust formation lasting days to weeks.

The most common distribution is thoracic, followed by trigeminal. Patients can develop chronic debilitating pain along the area of involvement referred to as post-herpetic neuralgia (PHN). The large majority of patients affected by this condition are over 50 years of age and those who are immunosuppressed are at increased risk.

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Management of herpes zoster consists of immunization with VZV vaccine in those susceptible to reactivation of the virus. The antiviral agent, acyclovir, can also be used to reduce incidence of VZV reactivation in those at risk.

Acyclovir can be started in the prodromal stage if there is a high suspicion of herpes zoster. If treatment begins within 72 hours of the onset of vesicular rash, it can accelerate healing of lesions, decrease duration of acute pain and possibly decrease frequency of PHN development.

Acyclovir is given at a dose of 800 mg orally, four times daily, for seven to 10 days.



## Case 3

### *A Noteworthy Nodule*

This 2 x 2 cm tan nodule with prominent telangiectasia and a central crust is seen on the face of a 65-year-old patient admitted to hospital with chronic renal failure and Type 2 diabetes.

#### *What is it?*

- Basal cell carcinoma (rodent ulcer type)
- Keratoacanthoma
- Squamous cell carcinoma
- Nodular melanoma
- Basal cell carcinoma (nodular type)

#### *Answer*

This lesion is pathognomonic for the rodent ulcer type of *basal cell carcinoma* (BCC) (**Answer A**).

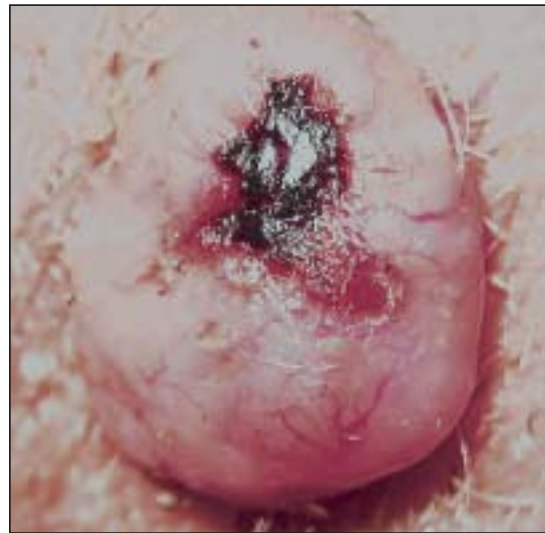
Typical appearance of an ulcerating BCC is a papule or nodule with a rolled border with telangiectasia and a central ulcer, often covered by a crust. Other types of BCC are:

- nodular,
- sclerosing,
- superficial and
- pigmented types.

These skin cancers are slow-growing and tend to invade only locally. BCCs in certain danger-areas of the face (including medial and lateral canthi, nasolabial folds and external ear canals) should be treated more aggressively. Treatment for lesions in these areas should be Moh's micrographic surgery.

Otherwise, lesions can be treated by:

- surgical removal,
- electrodesiccation and curettage,



- cryotherapy,
- radiation therapy,
- topical agents, including 5-fluorouracil and imiquimod.

Another new treatment modality is photodynamic therapy (PDT), which uses visible light with photodynamic dye to treat lesions.

Choice of treatment depends on:

- location,
- thickness/type of BCC,
- availability of treatment options and
- patient factors.



## Case 4

### “Why is it so itchy?”

A 23-year-old man presents with an itchy, inflammatory lesion in the occipital area.

#### What is your diagnosis?

- a. Acne necrotica
- b. Lichen planopilaris
- c. Contact dermatitis
- d. Acne keloidalis nuchae
- e. Folliculitis secondary to *Staphylococcus aureus*

#### Answer

This patient has *acne keloidalis nuchae* (AKN) (Answer D). AKN is an inflammatory dermatosis of uncertain origin and a primary cause of scarring alopecia. Early lesions are erythematous, firm papules, follicularly-based, found typically on the lower occiput (may extend from occiput to the vertex and crown) and may form large hypertrophic scars.

Although most commonly occurring in young, adult men with darkly pigmented skin, AKN may sometimes occur in Caucasians and females.

Aggravating and/or causal factors include:

- close shaving of hair,
- rubbing by collars and
- picking by patients (which should be avoided).



Treatment depends on stage of presentation. Early disease (papules and pustules scattered across the posterior neck and occipital scalp) is best managed by topical antiseptics or antibiotics (1% erythromycin or clindamycin).

Hypertrophic scars can be treated with topical or intralesional corticosteroids. In debilitating cases, surgical treatment is directed at removing the follicles in their entirety.

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## Case 5

### “Doc, what’s on my neck?”

A 32-year-old woman presents with hyperpigmented skin on the back of the neck. The skin is dark brown, dry and thickened, with a papillomatous velvety surface. The lesion is not itchy.

*What is the most commonly associated skin lesion?*

- Drugs (diethylstilbestrol, nicotinic acid and glucocorticoids)
- Insulin resistance
- Gastric adenocarcinoma
- Endocrine malignancy
- Hyperandrogenemia

#### *Answer*

This woman has *acanthosis nigricans* (AN). Lesions are hyperkeratotic and hyperpigmented, velvety plaques most commonly seen in intertriginous regions. It is most frequently associated with insulin-resistance states (**Answer B**) and less frequently with other metabolic disorders, drugs and malignancy.

Obesity is the most common cause of insulin resistance and AN. Other causes of insulin resistance and AN include polycystic ovarian disease and the familial lipodystrophies. Gastric adenocarcinoma is the most common malignancy associated with AN. Others include:

- endocrine malignancies,
- lung carcinoma and
- melanoma.



Management is aimed at treating the underlying cause. Fasting blood glucose and insulin levels should be checked, as well as screening for endocrine disease. If malignancy is suspected, the patient should be referred to a specialist for the best diagnostic procedure.



## Case 6

### *Is it diabetes?*

A 60-year-old former soccer player with diabetes has been on insulin for 20 years. Over the past eight years, he has noted progressive pigmentation of both pretibial areas.

#### *What's going on?*

- a. Diabetic dermopathy
- b. Necrobiosis lipoidica diabetorum
- c. Post-inflammatory pigmentation
- d. Bruises
- e. Contact dermatitis

#### *Answer*

*Diabetic dermopathy* (**Answer A**) occurs most frequently in men with diabetes over the age of 30, regardless of insulin dependency.

The lesions are atrophic, hyperpigmented patches, either singularly or in groups predominantly of the pretibial regions. They may be related to known or forgotten injury.

The microangiopathy sometimes seen in this disorder has been associated with retinopathy or neuropathy. There is no treatment.



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