Chapter 9:

Parasitic diseases – arthropods
9.1 Human scabies

Parasitic disease caused by Sarcoptes scabiei. Blackish burrows from 5 to 15 mm in length, ending in a vesicle at one end (“mite hill”). The sides of the fingers and the anterior surfaces of the wrist are sites of predilection. Numerous marks of excoriation, sometimes accompanied by fine more or less translucent vesicles spread all over the skin.

Basic Lesions: None specific

Causes: Infection
Human scabies

These excoriations are mainly the sign of very severe itching in the evening and at night.
Basic Lesions: Nodules

Causes: Infection

**Human scabies continued**

Scabies nodules: very distinctly infiltrated, extremely itchy reddish nodules in the axillae, on the scrotum, and on the penis, persisting even after successful treatment.
Human scabies

In children the lesions usually affect the feet: numerous extremely itchy excoriated papules.
9.2 Animal scabies

Numerous small itchy papules spread all over the skin, which regress spontaneously. There are no burrows. The patient’s pet (cat or dog) is typically found to be infested.
9.3 Pediculosis (head lice)

Wide impetigo-like patch at the nape of the neck caused by scratching, associated with very severe undiagnosed infestation.

Basic Lesions: Crusts

Causes: Infection
Basic Lesions:
None specific

Causes:
Infection

Pediculosis (head lice) continued

Area of attachment of a nit to a hair.
9.4 Crab lice (pubic lice)

Excoriations and presence of louse eggs firmly attached to the pubic hairs. There are also crab lice (Phthirius pubis) grasping the pubic hairs. On the body, relatively discrete bluish grey macules (maculae caerulæ) can sometimes be found.
Crab lice (pubic lice) 

These blue-grey macules correspond to the release of toxins by the crab louse in the course of successive bites.
Trombiculiasis

Immunological reactions to bites by harvest mites (larvae of Trombiculidae which feed on blood). Small itchy lesions, sometimes in a line, located anywhere on the skin, with predilection for constricted areas. The lesions sometimes rise to a point in the centre.
Trombiculiasis

Basic Lesions: Dermal Papules

Causes: Infection
Infantile papular urticaria (strophulus)

Occurring mainly in children, this type of papular urticaria occurs in the form of numerous small erythematous papules, sometimes with fine vesicles. The lesions are found mainly on the legs, are extremely itchy, and very likely to be excoriated. Sometimes a linear disposition is seen, which makes the diagnosis much more obvious. Infantile papular urticaria is caused by an ectoparasite with a cat or dog host.
Flea bites

Large inflammatory papules in a linear disposition. There is a distinct central acumination. Infestation is usually via a pet (cat or dog), which acts as the carrier.

Basic Lesions: Dermal Papules

Causes: Infection
Flea bites

In some cases the lesions become frankly bullous and even haemorrhagic.
Large encrusted papular lesion surrounded by an inflammatory rim. There is no associated pain or lymphadenopathy. The course is chronic and the lesion is resistant to conventional antiseptic treatments.
Leishmaniasis continued

It is a protozoan infection caused by a species of Leishmania. The carrier is a Phlebotomus fly, which explains why in most cases the lesions of leishmaniasis are found on uncovered areas (especially the face).
Leishmaniasis

After a few months the lesion subsides, leaving a scar of variable visibility.

Basic Lesions: Scars

Causes: Infection
9.7 Larva migrans (creeping eruption)

Inflammatory serpiginous line ending in a small, extremely itchy papule. Larva migrans is caused by a larva of an Ancylostoma species (hookworm) which migrates about 1 cm per day, thus extending the line of inflammation. In humans contact usually occurs on the beach (soil polluted with animal excreta). Cutaneous larva migrans is found mainly on the feet and the buttocks.
Basic Lesions:

- Dermal Papules

Causes:

- Infection

Larva migrans (creeping eruption)
9.8 Tungiasis (chigger)

Itchy inflammatory nodule with a small blackish opening at the centre, found in the periungual region of a toe. Secondary superinfection (abscess formation) may be present. Tungiasis is caused by a flea which lives on blood: Tunga penetrans.

Basic Lesions: Nodules

Causes: Infection
Tungiasis (chigger) continued

Infestation typically occurs on the feet (walking barefoot in areas where it is endemic, especially Africa and Central America).

Basic Lesions:
- Nodules

Causes:
- Infection