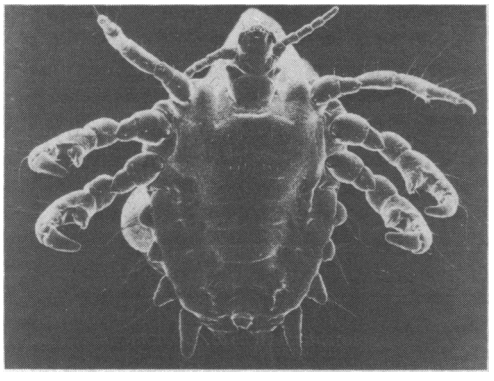
ABC of Sexually Transmitted Diseases

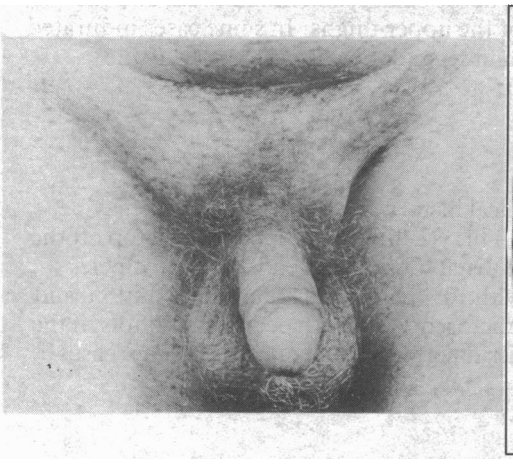
MICHAEL W ADLER

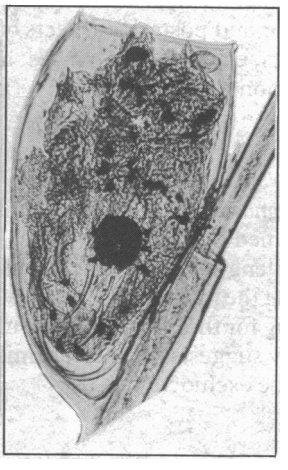
GENITAL INFESTATIONS

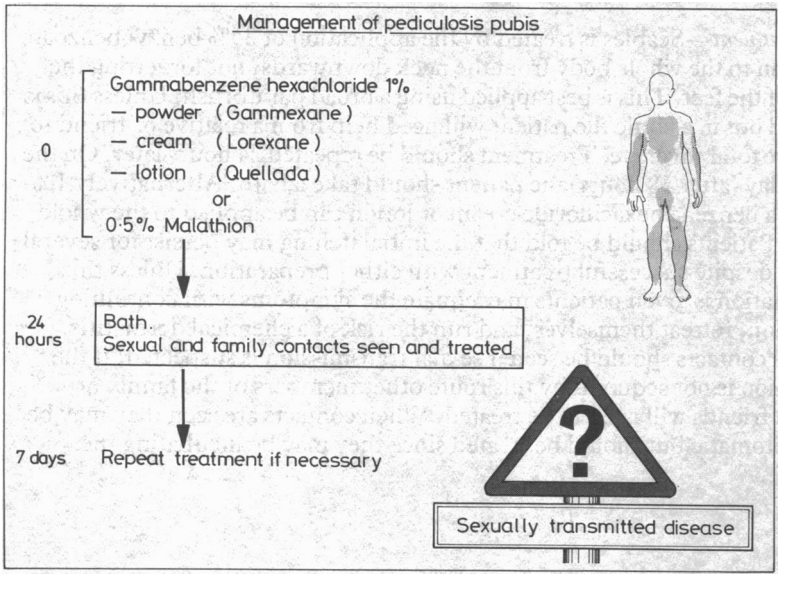
Pediculosis pubis



Infection is caused by the pubic louse, *Phthirus pubis*, which is a different species from that causing head and body louse infestation (pediculosis capitis and corporis). The insect is small and round (1-2 mm long) and has three sets of legs. The adult adheres not only to pubic hair but also to other hairy areas (perineum, thighs, abdomen, axillas, eyebrows, and eyelashes) and is a blood sucker. The female lays eggs (nits) at the base of hairs and these usually hatch within seven days. The adult louse is transferred from person to person during close bodily contact. Since lice do not leave the host the condition is not spread by wearing or sleeping in infested clothing or sheets. The patient may complain of irritation. Sometimes the condition is asymptomatic and the patient may be horrified to find the adult louse or nits on the body.





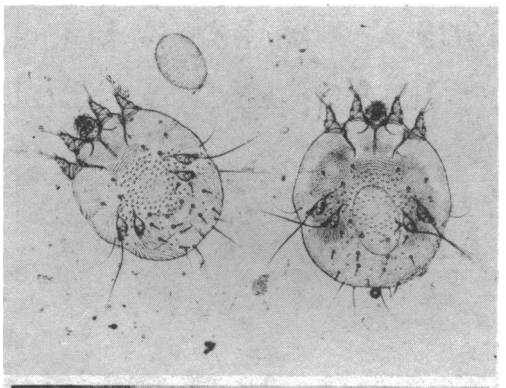


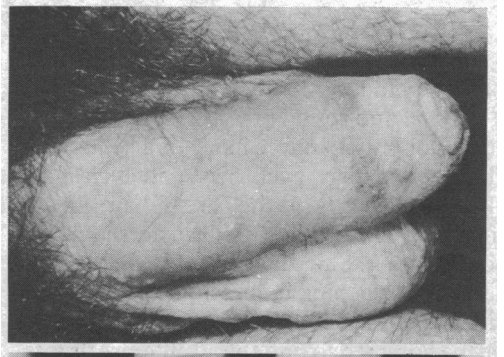
Diagnosis is usually based on clinical appearances alone. A hand lens is useful during the examination and a suspected louse on a hair may be removed and viewed under the low power microscope. Bluish grey macules occasionally occur on the abdomen, buttocks, or thighs at the site of the bites. As the condition is usually sexually acquired a full genitourinary and sexual history must be taken and the patient examined for other sexually transmitted diseases. Blood must also be taken for syphilis serology.

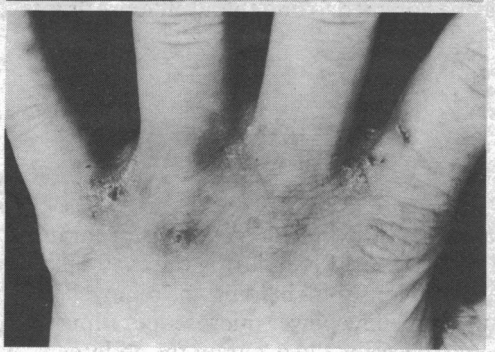
Treatment—1% gamma benzene hexachloride powder (Gammexane) or 0·5% Malathion should be applied to all the hairy areas apart from the scalp. The patient should not wash this off for 24 hours, after which a bath should be taken. Usually one application is enough, but a heavy infestation will necessitate further treatment within 7-10 days. Alternatively 1% gamma benzene hexachloride can be used as a cream or lotion (Lorexane, Quellada). There is no need to wash the patient's clothes and bed linen. Sexual partners should also be seen and treated, as well as family contacts who could be infected. Shaving of body hair is not necessary.

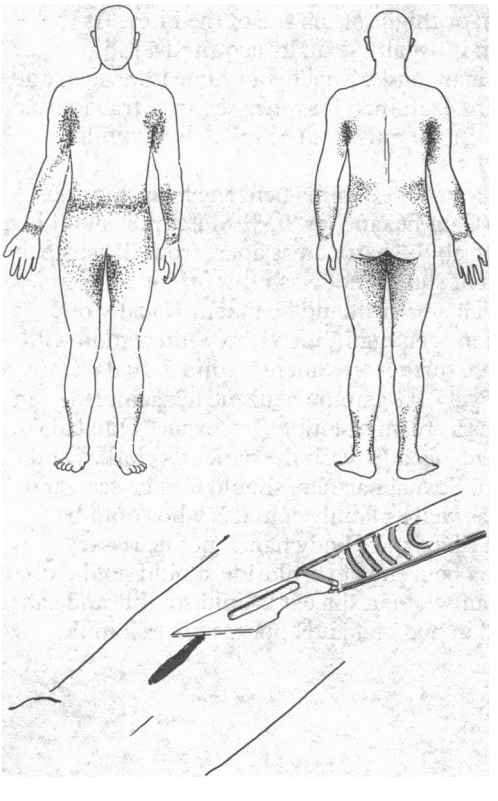
Gamma benzene hexachloride should not be used in pregnant women since it is lipid soluble and can be stored in body fat and appear in breast milk.

Scabies







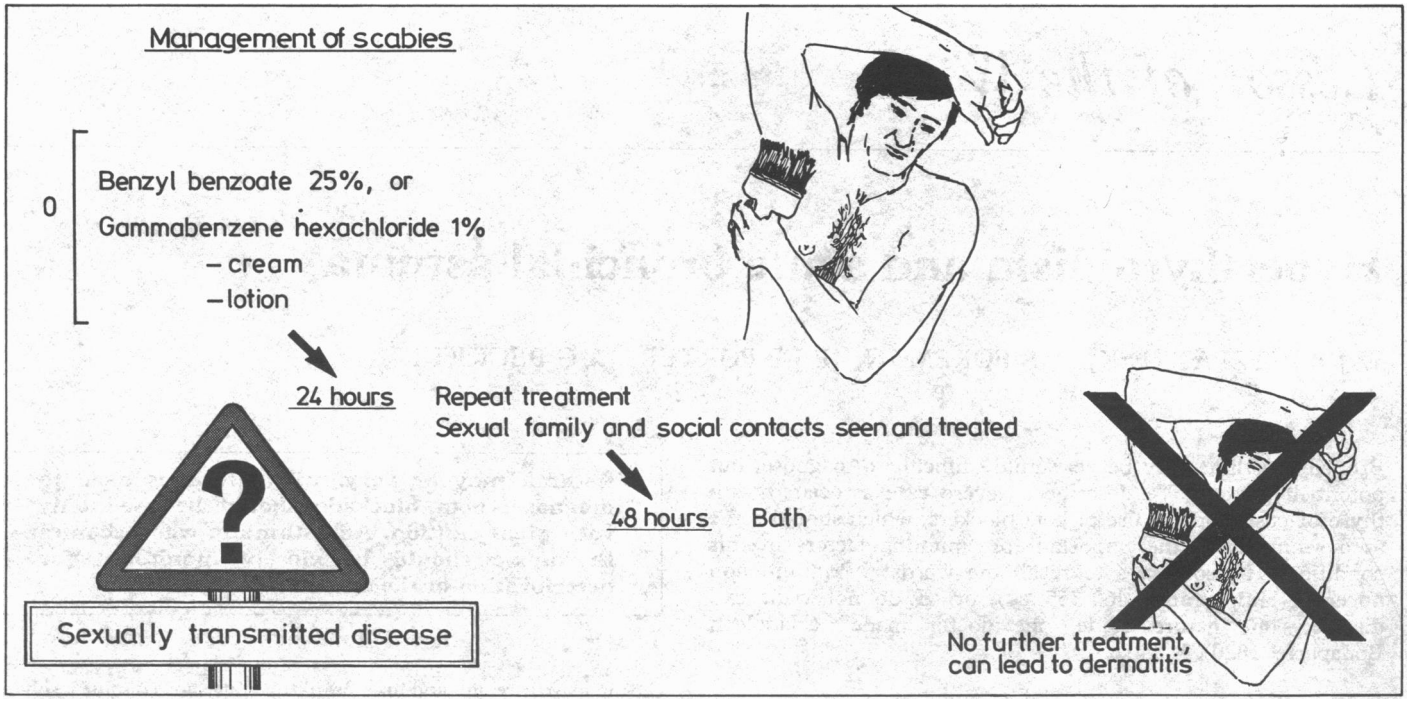


Infestation is caused by the mite *Sarcoptes scabiei*. The clinical features of scabies are caused by the female burrowing into the uppermost layer of the skin (stratum corneum) and laying eggs and defecating. The female is about twice the size (0·3 mm long) of the male and can just be seen by the naked eye as a black dot (mouth parts) at the distal part of the burrow. Infestation usually occurs as a result of close physical, but not necessarily sexual, contact. This needs to be reasonably prolonged since the insect moves slowly, at 25 mm a minute. Outbreaks of non-sexually acquired scabies may occur among schoolchildren and within whole households or longstay hospitals.

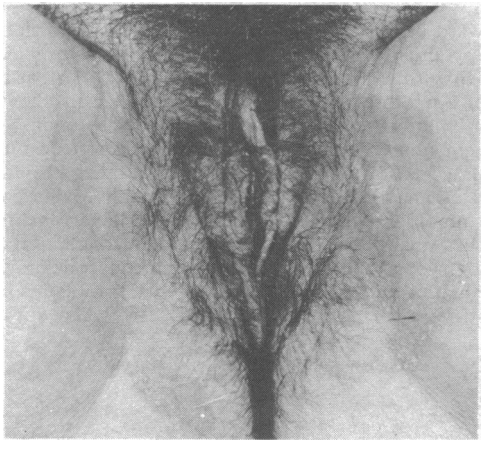
Symptoms are first noticed two to six weeks after infestation. Reinfection may give rise to symptoms within a few hours. The patient complains of itching, which is often unbearable, intractable, and worse at night when the body is warm. The sites of itching and burrows bear no relation to the mode of transmission. Thus lesions may often be found in the clefts of fingers and on the wrists and elbows as well as on the genitals. On examination the burrows may be the typical sinuous scaling reddish grey lesions (5-15 mm long), sometimes with small vesicles at their end. Scratching may, however, alter their appearance, with excoriation, ulceration, crusting, and bleeding; on the penis and scrotum they may appear as red papules. Associated rashes may also be found in sites distant from the actual burrows—in particular erythematous urticarial papules in the axillas, abdominal wall, and the anterior and posterior aspects of the upper thighs. In some cases indurated nodules, eczematous changes, and secondary infection with pustule formation may occur.

Diagnosis is based on the clinical history and examination and may be confirmed by finding the mite. This is achieved by scraping the top off the whole length of a burrow (from distal to proximal end) with a scalpel, putting the material on a slide with 10% potassium hydroxide solution, and looking for the mite under the microscope. As with pediculosis pubis, if the history suggests sexual transmission other sexually transmitted diseases must be excluded.

Treatment—Scabies is treated by the application of 25% benzyl benzoate solution to the whole body from the neck downwards, not forgetting the soles of the feet. This is best applied using a broad paintbrush. Unless this is carried out in a clinic the patient will need help from a relative or friend to achieve total coverage. Treatment should be repeated 24 hours later. On the third day (after 48 hours) the patient should take a bath. Alternatively 1% gamma benzene hexachloride cream or lotion can be applied to the whole body. Patients should be told that the initial itching may persist for several weeks despite successful treatment with either preparation. Unless this explanation is given patients may equate the symptoms with continuing infection, retreat themselves, and run the risk of a chemical dermatitis. Sexual contacts should be seen if sexual transmission is suspected; if the condition is not acquired by this route other members of the family or school friends will need to be treated. When contacts are seen they may be asymptomatic but should be treated since they may be incubating the disease.



Tinea cruris



Management	
Normally:	Benzoic acid compound ointment BPC (Whitfield's ointment ½ strength) Twice daily, continue for 1-2 weeks after resolution
Resistant / relapsing:	Griseofulvin, 500 mg once-twice a day for six weeks

Tinea cruris is a common skin condition, particularly in men. If limited to the groin area it is caused by one of two fungi—*Trichophyton rubrum* or *Epidermophyton floccosum*. The patient may complain of an irritating rash particularly in the groin. When patients attend a department of genitourinary medicine with this condition they may be extremely distraught because they fear that the condition is sexually acquired or even, having read about rashes, fear that it could be due to syphilis. The same type of patient consulting doctors outside the clinics may regard the condition as no more than a "sweat rash."

The rash has a scaly, marginated, erythematous appearance, the edges of which are occasionally vesicular or pustular. It needs to be differentiated from a seborrhoeic or contact dermatitis, psoriasis, and candidiasis. The diagnosis is based on the clinical history and appearance and may be confirmed by mixing scrapings of the lesions with 10% potassium hydroxide solution and viewing them under a normal microscope, when mycelium can be seen. The fungi may be cultured on Sabouraud's medium. Treatment with benzoic acid compound ointment *BPC* (Whitfield's ointment half strength) is cheap and highly effective. This is applied once or twice daily until the lesions disappear and should be continued for a further one to two weeks to avoid reappearance. Newer imidazole derivatives may be given, and in severe resistant or relapsing cases griseofulvin may have to be used, at a dosage of 500 mg once or twice daily for six weeks.

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