

DERMATOLOGY AND SYPHILOLOGY

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With the advent of the war in the South Pacific, medication for the prevention and cure of malaria was given to large numbers of men. During the past two years, atabrine (Quinacrine Hydrochloride) has been the drug most commonly used.

Sulzberger reviewed the literature concerning a peculiar lichenoid eruption which occurred in individuals in the armed forces who were receiving atabrine. The eruption began from a few days to several months after the patients began taking the medication. It was common for the eruption to begin with eczematoid changes on the extremities, face and neck, and in some cases it began as a generalized exfoliative erythroderma. Usually after the type of onset, lichen planus-like lesions appeared. These varied from typical, angular, violaceous papules to large hypertrophic lichen planus-like plaques, which later often showed atrophy, pigmentation or depigmentation. Some cases had leukoplakia-like lesions on the buccal mucosa and others had scalp lesions which at times caused permanent alopecia. At the Naval Medical Center in Bethesda, Maryland, atabrine was administered to a group of these patients with quiescent lesions, causing a high percentage of focal flareups of the eruption, and in some cases widespread eczematoid and exfoliating reactions. It is felt that there is little doubt that this peculiar lichenoid dermatitis is a drug eruption due to atabrine.

There are increasing reports of dermatitis due to the use of penicillin. Binkley and Brockmale reported a case of epidermal and dermal sensitivity to sodium penicillin, as proven by patch, scratch and intradermal tests. They reported another case who developed a dermatitis about six weeks after first exposure to penicillin but in whom the patch and scratch tests were negative. However, in this patient when penicillin was injected intramuscularly, there was edema and a confluent papular eruption involving the hands and feet. The skin of the feet had never been previously exposed to penicillin but had been the site of a chronic dermatophytosis. Other cases of a dermatitis developing at the site of previous fungous infections have been reported, and Sulzberger suspects that this localization may be due to a common allergenic fraction in the fungi found on the skin and in *penicillium notatum*. Cormia reported a serum sickness-like syndrome with generalized urticaria, mild arthralgia, and lymphadenopathy. This is now known to be a common reaction to penicillin. Miliaria-like and erythrema nodosum-like eruptions have also been reported.

About five years ago, there began on the East Coast of the United States an epidemic of ring worm of the scalp involving boys and girls of prepuberty. This has gradually spread to the Midwest and within the past eighteen months has assumed epidemic proportions in the State of Ohio. There are two organisms which commonly cause ring worm of the scalp: *Microsporon audouinii* and *Microsporon lanosum*. These two organisms differ in that infections due to *Microsporon lanosum* commonly cause a severe inflammatory reaction and can be cured with ease by local medication; whereas those due to *Microsporon audouinii* show almost no inflammatory response and are most resistant to any local therapy. In this epidemic, the first of its kind in the United States, the offending agent has been *Microsporon audouinii*. The Wood's light, which is ultraviolet light filtered through cobalt glass, causes infected hairs to shine with a bright green fluorescence, and is an indispensable diagnostic tool. At the present time, the treatment which is accepted and efficacious in these cases, is temporary epilation by means of x-ray.

Urbach recently described a syndrome usually presenting a clinical picture of furnuculosis, sweat gland abscesses, eczema and pruritis, in which there was a

normal blood sugar curve but microchemical examination of the skin itself showed the sugar content to be higher than normal. A low carbohydrate diet sometimes combined with insulin, caused marked improvement in the dermatoses.

Kaposi in 1897 described a varicella-like eruption which occurred in infants as a complication of eczema. Some authors have stated that this entity is the same as eczema vaccinatum. In December, 1944, Lane and Herold described five patients with this type of eruption, only one of whom could possibly have been infected with the vaccinia virus. In February, 1945, Lynch described a group of four cases with a herpetic eruption complicating atopic eczema. In three cases, he showed presumptive evidence that the herpes simplex virus was the causative agent and in one case, laboratory studies permitted the conclusion that the virus of herpes simplex caused the eruption. He suggested the name "eczema herpeticum." Blattner, et al., reported a case of a boy, age fifteen months, who had had atopic eczema since the age of six weeks, had never been vaccinated against smallpox, and who developed fever and an acute exanthema of the herpetic type. By animal experimentation, histo-pathologic and immunologic studies, they established the causative agent to be the herpes simplex virus. There seems to be little doubt that the herpes virus has been proven to be the causative agent of a varicella-like eruption, complicating atopic dermatitis.

Stryker and Halbeisen described a group of cases with cutaneous lesions consisting of a patchy or diffuse, scaly erythroderm involving the sides of the neck and anterior shoulders. These patients also exhibited a few signs of a mild vitamin deficiency, although all declared their diets to be adequate. Blood studies revealed a macrocytic anemia. Crude liver injections caused a disappearance of the eruption and a return to normal of the blood picture. These studies may throw light on some of the bizarre eruptions appearing around the shoulder girdle which commonly have been called neuro dermatitis.

In dermatologic therapy, a few new, useful agents have been introduced. Penicillin has been most promising in the treatment of the pyodermas. As in other fields of medicine, it has been tried indiscriminately in the treatment of dermatologic entities in which therapy has been unsatisfactory. It is not efficacious in pemphigus vulgaris, dermatitis herpetiformis, eczema, seborrheic dermatitis, acne vulgaris and the chronic dermatoses involving the hands.

Two new fatty acids, namely, propionic acid and undecylenic acid, have been introduced and widely used as a treatment for superficial fungus infections.

Eddy and his workers at the U. S. Bureau of Entomology, have developed formulas containing benzyl benzoate, pyrethrins, undecylenic acid, 2-4 dinitro anisole and DDT, in the treatment and control of head lice, crab lice and scabies. They have been largely responsible for the excellent control of these conditions in the armed forces.

The combination of Vitamin B complex and hydrochloric acid has been reported by at least three workers, to be helpful in the treatment of vitiligo.

Two new preparations, pyribenzamine (Ciba) and benadryl (Parke, Davis), appear to be useful drugs in the control of reactions caused by histamine. They are especially promising in the treatment of urticaria and although they are non-specific as far as the allergens producing the urticaria are concerned, they appear to be specific as far as the mechanism by which some of these allergens produce the disease.

Peters, after studying the chemical content of the exfoliated skin from patients with exfoliative dermatitis, treated them with cystine with good results. He suggested that in an attempt to restore the epithelium, the body had depleted its sulfur containing amino acids.

Cannon reported successful results in five cases of acute disseminated lupus erythematosus by the oral administration of iodine. He tried the treatment when he noted improvement in a case of acute disseminated lupus erythematosus

who had been given a dye containing iodine preceding roentgenograms of the gall bladder.

The most important advance in the field of syphilology is treatment with penicillin which appears to be most valuable in the treatment of early syphilis. The trend in treatment is to use a combination of penicillin and the heavy metals. Eagle, et al., have shown penicillin and Mapharsen to be synergistic in the treatment of experimental syphilis. Platou, et al., treated sixty-nine infants with early congenital syphilis and reported the immediate response to be encouraging. Rose, et al., gave a preliminary report on seventy cases of central nervous system syphilis treated with penicillin. The greatest improvement was in patients with general paresis. Dolkart and Schwemlein found it necessary to discontinue penicillin in the treatment of two cases of cardio-vascular syphilis because of the development of severe anginal pain. In general, it may be said that penicillin is a useful agent in the treatment of syphilis, but that no long term evaluation can be made as yet.

The incubation period of syphilis is considerably longer than that of gonorrhea and the effective dose of penicillin for syphilis is much larger than for gonorrhea. The small doses of penicillin which are successful in the treatment of gonorrhea may in a concomitant case of syphilis temporarily suppress the primary, secondary and serologic manifestations of early syphilis. This makes it mandatory that all cases of gonorrhea treated with penicillin be followed serologically for six months to one year, rather than three months as has been previously recommended.

Some important work has been done on the serologic verification tests. Rein and Elsberg examined six verification tests to determine their value. They found none of these methods to be of value in distinguishing consistently between true positive (syphilitic) and false positive or non-syphilitic reactions. It was their feeling that present verification tests are of no value in the sero diagnosis of syphilis. Scott, et al., in another study came to the same conclusion.

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