

following institution of treatment. Other symptoms included extreme weakness during and following the dialysis, unexpected changes in blood pressure, and a warm sensation to the skin. There was an apparent increased incidence of clotting within the arterial venous shunts. Pre- and post-dialysis levels of plasma calcium and magnesium were obtained from ten patients. The mean plasma calcium rose from 4.62 ($\pm$ 0.63.) to 7.49 ($\pm$ 1.26) mEq/liter, while the mean plasma magnesium rose from 2.49 ($\pm$ 0.89) to 3.93 ($\pm$ 1.34) mEq/liter. A dialysate sample revealed calcium and magnesium concentrations of 7.4 and 3.0 mEq/liter, respectively. A nonfunctioning water softener was found to be responsible for the high levels of calcium and magnesium found in the dialysate.

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SKIN DISEASES AND BURNS

- 758 Treatment of Burns With Intensive Antibiotic Therapy and Exposure. G.E. Collentine, Jr., B.A. Waisbren, and J.W. Mellender. J. Am. Med. Assn. 200, 939-942 (June 12, 1967).

The high mortality and serious morbidity of burns demands the publication of new methods of treatment that appear to have given results different from those reported by others. Therefore, the results of treatment with maximum tolerated doses of parenterally administered antibiotics and exposure in 500 consecutive patients admitted to the St. Mary's Burn Center, Milwaukee, between January 1961 and January 1964 are the subject of this report. Analysis of the mortality among this group of patients was performed by the probit method. Comparison of this mortality with that obtained at burn centers that used other methods of treatment suggests that intensive prophylactic antibiotic therapy may have merit in the treatment of severe burns. There are 19 references.

- 759 Caterpillar Dermatitis. F.F. Hellier and R.P. Warin. Brit. Med. J. 2, 346-348 (May 6, 1967).

An outbreak of dermatitis involving at least 22 children and 8 adults, and due to handling the yellow tail moth caterpillar (*Euproctis similis*) is described. The adults probably were affected by indirect contact through the children's clothes. Dermatitis occurred in a boy and his mother after contact with small eggar moth caterpillars (*Eriogaster lanestris*), in a young girl who had been playing with unidentified caterpillars, in a boy after handling a garden tiger moth caterpillar (*Arctia caja*), and in five boys who had been playing with a number of oak eggar moth caterpillars (*Lasiocampa quercus*). Patch tests carried out on volunteers showed a reaction at all tested sites to the three caterpillars used, namely, the small eggar, yellow tail, and white ermine. The poisonous hairs of the caterpillars are hollow cuticular tubes which pierce the skin. The nature of the substance injected is not fully known but the reaction appears to be due to a primary irritant or pharmacologically active substance, rather than an allergic response.

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- 760 Characterization of Ragweed Pollen Extracts Prepared by Sonication and Other Methods. D.G. McKaba and D.H. Sussdorf. J. Allergy 39, 285-294 (May, 1967).

Extracts of ragweed pollen were prepared by stirring for 48 hours, homogenization, or sonication, and by various combinations of these methods. The extracts were compared with respect to protein yield and to degree and stability of skin-sensitizing activity in ragweed-sensitive patients. Compared with the usual method of extraction by stirring, both homogenization and sonication proved to be highly efficient, rapid methods with respect to all criteria evaluated. A decrease in allergenic activity was observed in all extracts during storage over a 20-day period. Following fractionation of extracts on Sephadex G-25 and G-100 columns, most of the skin-sensitizing activity was found in protein fractions with a molecular weight between 5,000 and 70,000 although some activity resided also in a fraction of low molecular weight.

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- 761 Napalm. P. Reich and V.W. Sidel. New Engl. J. Med. 277, 86-88 (July 13, 1967).

Napalm, an incendiary substance made by the gelation of gasoline, has assumed an important role in warfare since its invention by L.F. Fieser in 1942. Named for naphthenate and palmitate, two constituents of the gelling agent, napalm has unique physical properties that have led to the perfection of various incendiary weapons. It produces injury by burn and carbon monoxide poisoning and through the production of fires and conflagrations. Physicians should be familiar with the nature and use of napalm, not only to be prepared to treat the injured but to be able to evaluate the decision to use it in warfare. The authors discuss Chemical and Physical Properties, Weapons, Extent of Use, Individual Casualties, and Mass Casualties. There are 23 references.