

autopsy label of emphysema is relatively common. Using the whole-lung parchment and the supplemental techniques of corrosion castings, post-mortem bronchography, serial histologic examination of the diseased lungs, and ventricular-septal weight ratios of the associated heart specimens a more penetrating analysis of this distinctive form of emphysema has been possible. The subject is discussed under the following headings: materials and methods; macroanatomy of the secondary lobule of the lung; macroanatomy of centrilobular emphysema; microanatomy of centrilobular emphysema; and cardiovascular lesions. -- Authors' summary

SKIN DISEASES AND BURNS

- 142 The "Toxin-Antitoxin" Phenomenon in Burned and Injured Human Subjects. S. R. Rosenthal, J. B. Hartney and Wilma S. Spurrier. *J. Am. Med. Assn.* 174, 957-965 (Oct. 22, 1960).

The presence of toxins in the blood of burned or otherwise injured patients was indicated by the demonstration of cytotoxic effects on HeLa cells, cytolytic effects on red cells of other burned or injured patients, and precipitogens against serums from patients with healed burns. Such serums were shown to contain antitoxic-antibody-like substances by demonstrating their ability to neutralize the cytotoxic effect on HeLa cells and by demonstrating the presence of hemolysins and precipitins. In preliminary clinical trials and transfusion of blood or plasma from donors with healed burns to critically toxic burned or injured patients was followed by prompt improvement. Serums obtained from the recipients after such transfusions were no longer toxic to tissue cultures. The authors recommend further clinical trials of antisera of known titer from persons with healed burns. -- Authors' abstr.

- 143 Dihydroxyacetone: A Suntan-Simulating Agent. H. I. Maibach and A. M. Kligman. *Arch. Dermatol.* 82, 505 (Oct. 1960).

A recent cosmetic development indicates the possibility of acquiring a suntan without exposure to the sun. Dihydroxyacetone, the active agent in these suntan-simulating preparations, is a triose sugar, which is an intermediate in the metabolism of carbohydrates in higher plants and animals. Dihydroxyacetone is a colorless substance which was found to combine with some mainly water-soluble component on or near the surface of the skin to bring about a brownish discoloration of the horny layer. This is a chemical staining reaction which does not involve any normal physiologic activity of the skin as synthesis of melanin, enzymic reactions, or microbial action. Some vitiligo patients found it a useful concealing agent. It did not act as a sun screen, nor were sensitization or toxicity noted. -- *J. Am. Med. Assn. Abstr.*

- 144 Cutaneous Porphyria in Turkey. R. Schmid. *New Engl. J. Med.* 263, 397 (Aug. 25, 1960).

About 5,000 cases of cutaneous porphyria have occurred in the Turkish provinces since 1955. The syndrome resembles porphyria cutanea tarda and consists of bullae and epidermolysis of the exposed skin, hyperpigmentation, hypertrichosis, hepatomegaly, and porphyrinuria. Epidemiologic studies incriminated hexachlorobenzene, a fungicide used treatment of seed wheat. The wheat had been used for human consumption instead of for planting purposes. Laboratory studies showed that 0.2% hexachlorobenzene, when fed to rats, produced urinary excretion of uroporphyrin and coproporphyrin. -- *J. Occ. Med. Abstr.*