# **REVIEW OF REVIEWS**

### BLACKWATER FEVER FROM INOCULATED MALARIA

The following case of blackwater fever following inoculated tertian malaria during the treatment of a case of general paralysis was abstracted, as follows, in the December number of *Medical Science*, *Abstracts and Reviews*:

"A case of blackwater fever is reported following mild benign tertian malaria artificially induced during the treatment of a case of general paralysis in Germany. The malarial parasite used originally came from the Balkans and had always appeared to be a typical plasmodium vivax whilst being passed through many cases of general paralysis. The attack of malaria in this patient showed no abnormal features, although the incubation period was only five days. The attack was cut short on the sixteenth day by giving an extract of cinchona for eight days. The total amount of extract given was estimated to have contained about 46 gr. of quinine. A week after the temperature had become normal and the parasites had disappeared from the blood the temperature began to rise; the patient was given 8 gr. of quinine and almost immediately passed typical urine, at first red and later black. The urine was clear again next day, but the patient was jaundiced and the blood showed typical changes. The temperature fell gradually to normal in about ten days. Paroxysmal haemoglobinuria cannot be certainly excluded, but the case suggests that blackwater fever can occur in the absence of mosquitoes or any tropical or local factor."

## NEW WAY OF TESTING SUSCEPTIBILITY TO DIPHTHERIA

The following abstract from an article on a proposed new method for detecting susceptibility to diphtheria was also taken from *Medical Science*, *Abstracts and Reviews*:

"Kassowitz has compared Schick's intracutaneous method of testing for susceptibility to diphtheria with a method which consists in rubbing a concentrated diphtheria toxin into scratches on the skin produced by Pirquet's scarifier. The toxin was concentrated by drying at 37° C. and redissolving in saline containing 33 per cent of glycerine. A control test was made with similar toxin inactivated by heat. One hundred and eighty-two children were tested by the intracutaneous and scarifying methods simultaneously. In the great majority of cases the results of the two tests were identical, the only exceptions being four children who gave positive cutaneous tests and doubtful negative Schick tests, and three children who gave a pseudo and negative reaction with the Schick test and merely a negative reaction with the cutaneous test. It was noticed that pseudo-reactions did not appear so readily with the cutaneous test.

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"The author remarks that if his cutaneous test only had been done no child would have been considered immune to diphtheria who was not so in fact; the test is simpler to the Schick test and avoids the difficulties due to poor keeping qualities of diluted toxin."

# EFFECTS OF ULTRAVIOLET RAYS ON INFECTIONS

The following conclusions are arrived at by Hill and Clark from a study of the effect of ultraviolet radiation on resistance to infection.

Hill and Clark tested the effects of radiation with a quartz mercury arc on rats which had been previously injected with culture of pneumococci.

"In general, groups of rats receiving a large daily dose of ultraviolet radiation grew at a slower rate than the controls during the first week of treatment. This effect was probably associated with the very severe burns from which they were suffering during this period as they subsequently grew at the normal rate. Groups receiving small daily doses grew at the same rate as the controls, and in no instance did the radiated animals show any increase in the rate of growth."

"There was no change in the erythrocyte or leucocyte counts in rats receiving daily doses of ultraviolet radiation. The platelets showed a consistent increase in all the radiated animals, but there was no correlation between a high platelet count and subsequent resistance to a general infection with Pn. I."

"Ultraviolet radiation given after injection to the test culture of Pn. I had no effect. In two out of three experiments radiation, over a period of two to three weeks before injection, increased the resistance slightly indicating some possible benefit if radiation precedes infection."

"We conclude, therefore, that the present state of our knowledge concerning the effect of ultraviolet radiation on susceptibility to infection does not justify its use as a general therapeutic agent in infectious diseases and gives very little support to the belief that it is enpable of increasing natural resistance in normal individuals."

-The American Journal of Hygiene.

## MORTALITY IN ACUTE ABDOMINAL AFFECTIONS

"The increase in the death rate from appendicitis is nine per cent greater than that from cancer during the past ten years; and while the total death rate from cancer is six times that of appendicitis, four times as many people die from appendicitis before the age of fifty, which is the productive period, than from cancer", says Dr. John O. Bower, of the Samaritan Hospital, Philadelphia, writing for The American Journal of the Medical Sciences.

He believes that the mortality from acute diseases such as affections of the abdomen, is unnecessarily high and that it could

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be lowered considerably if the public were educated on the necessity of consulting the doctor as soon as acute abdominal diseases set in.

The cause of the high mortality rate in abdominal diseases is due for the most part, says Dr. Bower, "to loss of time between the onset of symptoms and operation", and he believes that "the prevention is the education of the public through the family physician".

He makes a statistical study of appendicitis, intestinal obstruction, acute perforation of the duodenum or stomach, acute pancreatitis, ectopic pregnancy, and acute perforation of the gall bladder.