urine from the kidney that is normally innervated, while the denervated kidney continues to secrete normal urine. The close association of the state of the renal vessels to the possible damage by bacteria and toxins and the obvious importance of the skin-kidney autonomic connection is apparently demonstrated in experiments such as these.

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The Rôle of Staphylococci in Food Poisoning.

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In food poisoning of the gastrointestinal type attention has been previously focused chiefly on the Salmonella (paratyphoid-enteritidis) group of bacilli. Some European observers have been unwilling to attribute etiological significance to any other organisms. During the past few years, however, material from a number of well defined food poisoning outbreaks, apparently of bacterial origin, has been subjected to thorough bacterial examination in our laboratories without being found to contain any paratyphoid bacilli. I have consequently become convinced that in a considerable number of cases some other bacterial factor is involved. A recent outbreak in Chicago in which a yellow staphylococcus was found by Dack and other workers[1] in this laboratory to be the probable causal agent has led me to carry out some observations on other staphylococcus strains.

With the aid of human volunteers the sterile filtrates of 6 staphylococci have been tested. From 5 to 10 cc. of sterile broth filtrates of these organisms taken by mouth has caused in a few hours the train of food poisoning symptoms commonly met with: dizziness, loss of appetite, nausea, vomiting and diarrhea. These staphylococci are of diverse origin and are not of uniform cultural character. Three of these were isolated from normal human throats, one from a case of septicemia in man and 2 from food implicated in "food poisoning" outbreaks. With the amounts of filtrate used not all volunteers were affected, but out of 34 taking approximately the same quantity 26 became definitely ill with characteristic symptoms.

[1] Dack, G. M., Cary, W. E., Woolpert, O., and Wiggers, H., *J. Prev. Med.*, 1930, iv, 167.

Eleven control subjects taking the same food at the same time without addition of filtrates remained well, but one reported the occurrence of food poisoning symptoms. Since this individual had been made quite ill with filtrates the previous week, the second attack may have been due to suggestion or to association with those who were ill.

The toxic substance in staphylococcus filtrates that causes food poisoning is destroyed by boiling and either destroyed or greatly weakened by heating at 60-65°C. for 30 minutes.

A second attack has been produced in one and the same individual by feeding a second portion of the same filtrate after a week's interval.

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Neutralization of the Virus of Poliomyelitis by Human Sera.*

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The investigations of Netter and Levaditi,[1] Anderson and Frost,[2] Peabody, Draper and Dochez,[3] and of Römer[4] among others indicate that the sera of persons who have recovered from an attack of poliomyelitis have the power to neutralize the virus of this disease. Netter and Levaditi[5] and Taylor[6] have shown that sera from this group of persons do not always possess this neutralizing power, however.

The work of Anderson and Frost[2] and of Peabody, Draper and Dochez[3] and of Leake[7] indicates that sera from suspected "abortive" cases of poliomyelitis are not certain in their action against the virus.

These 3 latter groups of observers have reported experiments in which sera of normal persons have sometimes neutralized the virus, although usually they did not.

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[1] Netter, A., and Levaditi, C., *Compt. rend. Soc. de Biol.*, 1910, lxviii, 617.

[2] Anderson, J. F., and Frost, W. H., *J. Am. Med. Assn.*, 1911, lvi, 663.

[3] Peabody, Draper and Dochez, 1912, *Mono. Rockefeller Institute*, No. 4.

[4] Römer, P. H., *Epidemic Infantile Paralysis*, 1913, Eng. tr., New York.

[5] Netter, A., and Levaditi, C., *Compt. rend. Soc. de Biol.*, 1910, lxviii, 855.

[6] Taylor, H. D., *J. Exp. Med.*, 1919, xxix, 99.

[7] Leake, J. P., *Hygienic Lab. Bull.*, No. 111, 1918.