

which was loaded with germs, apparently from the rectum. There was no obstruction of the flow from the ureters, as would have been indicated by dilatation of these tubes and the pelvis of the kidney. On removing the kidneys, ureters, rectum and anus, it was found that the implantation had been carried out in a thoroughly satisfactory manner. The papillæ, as seen in the photograph (Figure 2, B) presented quite prominently on the rectal mucous membrane. They were clearly in a viable condition, and if the patient had survived certainly would not have sloughed, but would have persisted as prominent papillæ, as I have described as occurring in my other cases. The rectum itself showed no signs of inflammation, nor was there any eczematous condition about the skin of the anus.

*Pathological Report* by Prof. J. J. McKenzie, University of Toronto: The gross condition of the kidneys is one of acute nephritis, with some dilatation and congestion of the ureters; the right kidney showed somewhat more acute change than the left.

The microscopic examination of the fluid in the pelvis of the kidneys showed the presence of large numbers of bacteria, red blood corpuscles and masses of epithelium mixed with crystals of ammonio-magnesium phosphate and of uric acid.

Cultures from the pelves of the kidneys showed that the bacteria which were present were chiefly of four types, viz.: the commonest form was a variety of the proteus bacillus; with this was associated the colon bacillus, a staphylococcus and a streptococcus.

A study of the sections showed a condition of diffuse nephritis which was most marked in the pyramids; there was an almost complete desquamation of the epithelium in the larger collecting tubules and papillary ducts; the latter contained, besides masses of epithelium, zooglear collections of bacteria which consisted largely of bacilli.

Judging from the results of *post mortem* examination, and from the bacteriological examination which was made for me by Professor McKenzie, I have not the slightest doubt that this case proved fatal through an infection which spread up from the rectum through the ureters to the kidney. As I have stated above, I am strongly disposed to think that this might not have occurred had I not inserted the catheters, as the presence of these tubes prevented the papilla-valve from acting properly.

*Remarks.*—In the description above given of the method of performing this operation, it will be noticed that I have departed slightly from that given in regard to my first case.\* Fuller experience has taught me that though it is desirable to dilate the sphincter, it is not necessary to insert the sponge in the rectum, as therein advised. It is, however, advisable to wash out the rectum as well as possible by an enema given some hours previous to the operation;

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\* *British Medical Journal*, June 22nd, 1901.