

Necropsy.—Confirmed the cystoscopic findings. The ureters were dilated to a diameter of 15–20 mm. and the kidneys showed chronic hydronephrosis and haemorrhages due to pyelonephritis.

Case 3.—E.F., aged 76, had prostatic symptoms for six weeks and absolute retention for one day. Blood urea 50 mg.%. The bladder was slowly decompressed for 48 hours with an indwelling catheter. Five days after admission the patient died in uraemic coma.

Necropsy.—Kidneys slightly smaller than normal and the surface a little granular. There was marked pyelitis in both kidneys and the ureters were filled with blood. The bladder was slightly thickened and the mucosa showed a heavy haemorrhagic cystitis. The prostate was enlarged about 2 in. (5 cm.) in diameter and the median lobe projected into the bladder about an inch (2.5 cm.). The bladder contained thick haemorrhagic pus and the histological findings confirmed the presence of pyelonephritis.

Economy of space forbids a full report of all patients, but the three cases are typical examples of a much larger series. It may be pertinent to note that "slow decompression" in Case 3 did not prevent fatal renal haemorrhage, which is obviously not solely related to rapid decompression. Surely there is adequate histological and bacteriological evidence that these haemorrhages are due to a virulent renal infection which may resolve with the help of antibiotics or end in fatal suppurative pyelonephritis (Case 1).

Acute retention is as much an emergency as acute appendicitis and is eminently suitable for treatment by aseptic prostatectomy if the patient can co-operate. It is agreed that infection follows this operation, but it usually does no harm, because the urinary obstruction is removed. In a recent follow-up of 55 patients three to four years after aseptic prostatectomy 44 had sterile urine, 3 bacilluria, and 8 pyuria which produced symptoms in 2–3 cases. Only 6 cases were sterilized by antibiotics.—I am, etc.,

Liverpool, 3.

R. MARCUS.

SIR,—Mr. Stephen Power's letter (December 6, p. 1256) in defence of the catheter is welcome. One may acknowledge the importance of asepsis in prostatectomy without abandoning the pre-operative use of a catheter. It has yet to be proved that the infection which develops during a period of catheter drainage is due to the introduction of organisms at the time the catheter is passed. There are many ways of attempting to solve the problem of infection in prostatic surgery, and usually several means are used together so that it is difficult to know how to apportion the credit for successful results. For instance, "immediate" prostatectomy has only been practised since antibiotics came into use, and it is impossible to know whether the antibiotics or the avoidance of the catheter have been responsible for the improved results, quite apart from other factors involved. On the other hand, no series yet published of the results of "immediate" prostatectomy are as good as the best American figures for perurethral resection (in terms of mortality), and of course perurethral resection necessarily involves the passage of instruments up the urethra.

No one would deny that the use of an indwelling catheter before or after prostatectomy may be followed by complications. What we do not know is exactly how these complications arise. I believe that one factor not sufficiently investigated is the chemical composition of the catheter. Rubber may contain a great variety of irritant substances, and evidence is accumulating that the present prevalence of troublesome thrombophlebitis after intravenous infusions is due in part to the rubber tubing. May not the difference between the British and the American attitude to the indwelling catheter be due partly to differences in the type of rubber of which the catheters are made? I have seen a number of subterminal strictures of the urethra develop after retropubic prostatectomy in which a red rubber whistle-tip catheter was used, never larger than 22F gauge, sometimes smaller if the urethra was narrow. On the other hand I can hardly recall one such stricture after perurethral resection, in which I almost always use a Foley (latex) catheter, usually 22F gauge. Another case has suggested to me the possible virulence of rubber. A young boy with

severe scalds of the abdomen and penis was treated with an indwelling red rubber catheter for less than 48 hours. He developed severe encrusted urethritis with secondary stricture formation. On the other hand I have seen (in America) a labourer who had suffered bladder dysfunction following abdomino-perineal resection of the rectum, and who returned to full work with an indwelling Foley catheter without obvious detriment to his urethra. If the advantages of the indwelling Foley catheter are to be effectively exploited we need to know more about the irritant effects of the type of rubber used in catheter manufacture and we need to know exactly how infection reaches and settles in the urinary tract.—I am, etc.,

London N.18.

B. H. PAGE.

Iron Therapy

SIR,—I have read with interest the article on iron therapy by Dr. David Haler (December 6, p. 1241), and I should like to raise two points in connexion with his statistical treatment of the data obtained.

In his use of the "coefficient of iron utilization" Dr. Haler does not make it clear that this coefficient is independent of the degree of utilization by the body of the iron prescribed. It is most simply computed from the formula:

$$\frac{\text{Duration of therapy (in days)} \times 3}{\text{Total available iron prescribed (in g.)}}$$

The coefficient is therefore not related *per se* to the results of therapy but is inversely proportional to its intensity. In consequence Dr. Haler's comparisons with the coefficients obtained by Staub and Witts are valueless unless their therapeutic results are also compared. It is my opinion that the continued use of the "iron utilization coefficient" will lead only to further confusion of both the writers of articles and their readers.

Finally, it should be noted that Table II of Dr. Haler's article has been incorrectly calculated; in particular Cases 4, 7, and 23.—I am, etc.,

Carshalton.

D. WISE.

Science and Mankind

SIR,—I remember the days when a carbuncle was one and one experience only in a lifetime. To-day, antibiotics, though dramatically curtailing the course of the illness, have rendered recurrences extremely common. We observe the same phenomenon in acute throat infections—rapid recovery, but an exacerbation sometimes as early as three weeks after the first attack. A "short cut" to recovery in a benign condition would appear to be illogical. Let us ponder. Are we not artificially creating strains of bacteria of ever-increasing virulence which might conceivably wipe out mankind? For, concurrently with the increasing deadliness of these organisms, we are depriving man of his natural powers to destroy the "enemy." We are relying on antibiotics to do the fighting for us at the expense of our acquired immunity. Envisaging the remote future, we must hope that more and more lethal antibiotics will be discovered, but does not this process become frightening? Is this a counterpart of our scientific progress which has culminated in the production of the atomic and hydrogen bombs? Cannot the remedy for these "cosmic" dangers lie in prophylaxis? Prevention of disease by creating conditions that enhance health of body and mind, better air, better food, more "light," less speed, etc., and with the creation of more and more health there will inevitably follow healthier minds, clearer thinking, and more wisdom. Our arsenal of A-bombs and antibiotics would no longer be necessary.

That "diphtheria" has disappeared because of immunization is a foregone conclusion, but—for there is always a "but"—what has happened to the organisms that played havoc with our populations in the influenza epidemic of 1918? Our vision both forward and in retrospect is unable to penetrate but the thinnest periphery of true knowledge;