The specimen was a villous papilloma of the colon. Section of the growth showed marked cellular hyperchromatism and occasional mitoses, but there was no invasion of the bowel wall at the base of the tumour.

COMMENT

The classification of benign tumours of the colon and rectum is much confused. Bockus (1944) gives a separate place to the villous papilloma as a variety of adenoma. Bacon (1938) describes the villous papilloma as a rare and single tumour, which may often become very large. He says it is more common in men than in women, and occurs between the ages of 35 and 55. On section the tumour is made up of innumerable villi lined with columnar cells, and the very large surface area of the tumour explains the opportunity for fluid loss. It is stated that malignant degeneration occurs in 20% of the cases (Rankin *et al.*, 1932). Burns (1950), in reporting nine cases, does not mention fluid loss to the point of dehydration. Eight of his patients are alive and well following various operations; one died from the operation. Further perusal of the literature has not revealed a case record in which the amount of fluid and electrolyte lost from the surface of the tumour was so great that extreme salt depletion and extrarenal uraemia was produced.

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Recovery from an Incompatible Blood Transfusion Complicated by Anuria

Grossly incompatible blood transfusions have become rare since the intricacies of the indirect and direct matching tests have been appreciated. Nicholson (1948) reported from a group of blood banks 67,844 transfusions with 18 haemolytic reactions and 3 deaths. It is unlikely, therefore, that any individual doctor will see or treat many cases of incompatible transfusion.

Discombe (1952) discussed the causes and treatment of six ABO incompatibilities which had occurred during the transfusion of over 10,000 bottles. He emphasized the two types of clinical response to incompatible transfusion: one with immediate circulatory collapse, which carries a very high mortality; the other ordinary haemolytic reaction, with pain in the loin, rigor, fever, and haemoglobinuria, sometimes followed by anuria, which is less lethal. None of the cases described by him developed anuria, and all recovered. He attributed this success to the Borst (1948) regime (Bull *et al.*, 1949), which in his experience had changed a 100% mortality following the forcing of fluids and intravenous sodium sulphate into a 100% recovery.

The following case developed complete anuria which lasted for 12 days, and is therefore thought to be worth recording.

CASE REPORT

A Chinese woman aged 28 was admitted to hospital in the early hours of the morning with the typical signs and symptoms of a ruptured ectopic pregnancy. She had had amenorrhoea for seven weeks. She was advised immediate operation, but refused. During the day her symptoms increased in severity, and 14 hours after admission she consented to laparotomy. By this time she was slightly shocked. Following the administration of two bottles of plasma substitute her condition improved. Laparotomy

confirmed the diagnosis: there were 3-4 pints (1.7-2.3 litres) of free blood in the peritoneal cavity. The right Fallopian tube was removed.

After the operation her condition was fairly satisfactory, but, influenced by her relationship to a member of the nursing staff and the appearance of three males who wished to donate blood to her, it was decided to give a transfusion on her return to the ward. Two of the donors were declared to be compatible, and before recovery from anaesthesia had taken place 1,000 ml. of blood was given. Nothing abnormal was noticed during the transfusion. Twelve hours later she was seen to be slightly jaundiced. As she had not passed urine spontaneously, the bladder was catheterized and 2 oz. (57 ml.) of dark brown urine obtained. This was found to contain free haemoglobin, and was the last urine to be passed for 12 days.

An immediate cross-check on the compatibility of the blood was carried out and the patient was found to be Group A and both donors Group B. Although the laboratory technician had cross-matched the blood, he had failed to group either the donors or the recipient. 80 ml. of 5% sodium bicarbonate was given intravenously, and the patient started on the Bull-Borst regime:

Glucose	..	400 g.	} per 24 hours
Peanut oil	..	100 g.	
Acacia	..	q.s. to emulsify	
Water	..	to 1,000 ml.	

via an intragastric drip.

No previous experience with such a small fluid intake in a tropical climate with high humidity was to be found in the available literature, and no facilities for biochemical investigation were at hand.

Twenty-four hours later her condition appeared to be deteriorating. Her jaundice was by this time intense: she complained of severe nausea, her temperature was 103° F. (39.4° C.), and her pulse was weak and rapid. The relatives were told that the prognosis was almost hopeless.

On the following day her condition was unchanged, and she vomited three times. The vomit was strained and returned to the stomach. On the fifth day her general condition had slightly improved: the jaundice was less intense and her temperature was normal. She complained of severe thirst, but as her tongue was moist extra fluid was withheld. The bladder was again catheterized, but no urine was obtained. The blood urea at this time was 90 mg. per 100 ml. From then on, subjectively, she showed slight daily improvement; however, daily catheterization proved that no urine was being secreted. The blood urea on the 10th day was 165 mg. per 100 ml.

On the 12th day 3 oz. (85 ml.) of urine was removed from the bladder. She was allowed small quantities of fruit juice by mouth, and also drank 150 ml. of Darrow's (1950) potassium solution. On the next day she passed 30 oz. (850 ml.) of urine spontaneously, and the intragastric drip was stopped.

Penicillin, 500,000 units b.d., was given throughout the period of anuria.

From then on recovery was uneventful. She was discharged from hospital on the 22nd day. At this time she still had a slight icteric tinge. Two weeks later this had completely disappeared and the blood urea was 28 mg. per 100 ml. When last seen, three months later, she was extremely well: the blood urea was unaltered, a urea concentration test was within normal limits, and the blood pressure was 120/75.

I wish to express my thanks to the Director of Medical Services, Federation of Malaya, for his permission to publish this case.

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