food (Kerr and Kirkaldy-Willis, 1946; McWatters, 1945). Rose (1955), discussing the aetiology, mentioned hypermotility and bowel distension as exciting causes. In secondary volvulus there is usually an abnormal congenital or acquired fixation of the intestine.

In this case the past history is consistent with attacks of subacute volvulus recurring over seven years. Though no anatomical abnormality was obvious in the mesentery, a volvulus through 720 degrees suggests undue mobility and length of mesentery. This could have been the result of previous subacute attacks of volvulus or it could have predisposed to them. Bulky diets are said to cause an increase in length of bowel and mesentery as well as hypermotility (Dickson, 1950). There was no evidence of unusual dietary habits in this patient. The right inguinal hernia might have anchored a loop of small intestine and produced a secondary volvulus. However, this hernia was said to be easily reducible up to the final attack of strangulation and to have been present for only two years. If it was responsible its repair should have cured the tendency for the bowel to undergo volvulus.

The final attack of volvulus appeared to start only after the inguinal hernia had been repaired and the bowel resected. It is possible, though unlikely, that the anastomosis acted like the occasionally reported antimesenteric tumour by partly anchoring the bowel and predisposing to volvulus (Aird, 1957). Lulenski (1961) reported cases where volvulus was superimposed on small-bowel obstruction. In this case the anastomosis appeared widely patent without any evidence that it could have caused mechanical obstruction. After any abdominal operation, especially with intestinal resection, there occur transient ileus, gaseous and fluid distension of bowel, and later

hypermotility. Sparkman (1952) and Cave (1953) reported cases of volvulus in the immediate postoperative period in which they thought that distension and hypermotility of the bowel were the exciting causes. It seems probable that this patient was subject to recurrent attacks of subacute primary volvulus and that the inguinal hernia was incidental. After the herniorrhaphy postoperative bowel distension and hypermotility were exciting causes in precipitating the final volvulus.

This case strengthens the view that postoperative distension can be an exciting factor precipitating volvulus, though a further predisposing cause is usually required. It emphasizes the necessity for observing carefully the progress of postoperative complications for any sudden deterioration that might call for urgent surgical treatment.

We are grateful to Mr. T. B. Field, who was in charge of this patient, for permission to publish this case.

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Relation of Pregnancy Toxaemia to Trophoblastic Tumours

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While the cause of pregnancy toxaemia remains obscure, the study of case histories of women with benign trophoblastic tumours (hydatidiform mole) serves to throw some light on this difficult subject.

The diagnosis of hydatidiform mole depends on four criteria: (1) a discrepancy between the expected and the actual size of the uterus, (2) the presence of pre-eclampsia before the 28th week of pregnancy, (3) a high urinary gonadotrophin excretion after the 16th week of pregnancy, and (4) the absence of foetal parts on radiology after the 16th week of pregnancy.

During 1958-64 250 cases of benign trophoblastic tumour were admitted to the General Hospital, Kuala Lumpur, and 66 (26.4%) of these had pre-eclampsia as defined by Dieckmann (1952), the disease being mild in 36 and severe in 30.

Size of the Uterus Related to Proportionate Incidence of Pre-eclampsia in Cases of Benign Trophoblastic Tumour

Size of Uterus	Total Cases	Pre-eclampsia	
		No.	%
Less than 12 weeks' pregnancy	8	0	0
12-15 " " " "	17	1	6.0
16-19 " " " "	75	10	13.3
20-23 " " " "	78	22	28.2
24-27 " " " "	55	22	40.0
28 or more " " " "	17	11	64.7
	250	66	26.4

When the size of the uterus was related to the incidence of pre-eclampsia, it was noted that the greater the uterine size the more frequent was the associated finding of pre-eclampsia (see Table). But no correlation between the size of the uterus and the severity of toxaemia was noted.

COMMENT

That a higher proportionate incidence of pre-eclampsia was found in cases where the trophoblast was more active implies that abnormal trophoblastic activity rather than mechanical distension of the uterus is a precipitating cause of pre-eclampsia.

This opinion was further supported by the history of one of the patients who was admitted at 14 weeks' gestation with severe pre-eclampsia. She was Chinese, aged 24, gravida 2. Examination showed the uterus to be enlarged to the size of a 16-week gestation. A week after admission the uterus had enlarged to the size of a 20-week gestation, and the pre-eclampsia continued. Eight days after admission the signs of pre-eclampsia suddenly disappeared and no further uterine growth was noted. Intrauterine death was suspected, and as the uterus failed to expel the foetus spontaneously labour was induced with an oxytocin infusion on the 20th day after admission and a hydatidiform mole surrounded by fibrin and decidua was expelled.

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