Gastric aspiration/lavage is mandatory in the unconscious intubated patient, both to identify the products ingested and to reduce further absorption in massive ingestion. We have also had reason to use it to recover saline emetics administered shortly before arrival in the Accident and Emergency Department by misguided first aiders. In my experience saline is a poor emetic, and in the young child it should be recovered before it is absorbed and produces metabolic problems. Gastric aspiration is the logical treatment for true drug ingestion in liquid form where a large quantity has been taken—including alcohol! (We recently recovered 380 ml of whisky.)

Ipecacuanha, of course, is the method of choice where the ingestion of vegetative matter has occurred, particularly in the form of berries or mushrooms, not only to recover the ingestant, but on occasions to identify it and to enable its toxicity to be confirmed.

MARIE T. BROOKES

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Injuries in early-adolescent girls

Sir

Clinical experience suggests that X-ray investigation of injuries in early adolescent girls is often unrewarding. These girls often complain of more discomfort than their injuries would suggest and they are frequently unable to localise the source of their pain. To test this hypothesis the following survey was carried out: all children with solitary injuries of the upper or lower limbs and between the ages of 8–14 years (inclusive) were examined over a 5-month period. The period surveyed was from May to October 1984. During this time total attendances were 16 847 of which 902 fell into the study group. The presence or otherwise of an X-ray abnormality was noted. Patients with more than one injury were excluded as were the victims of road traffic accidents. Patients with injuries to the skin were not included. The results obtained are shown in Table 1. They show that for girls of 11–14 years the chance of the X-ray being positive is almost half that for other groups. These results have been subjected to statistical analysis (chi-squared tests incorporating Yates correction) and this confirms that the apparent difference between

Table 1 Percentage of positive X-rays in pre-adolescent and early-adolescent males and females

	Female								Male							
Age	8	9	10	11	12	13	14		8	9	10	11	12	13	14	
Total attendances	33	41	49	65	77	72	69		47	37	48	80	96	93	95	
Positive X-rays	18	15	24	12	21	21	11		20	15	19	40	34	39	39	
Normal X-rays	14	22	24	50	53	44	56		23	21	28	37	58	50	54	
Not X-rayed	1	4	1	3	3	7	2		4	1	1	3	4	4	2	
Positive X-rays as a percentage of total attendances	55	37	49	18	27	29	16		43	41	40	50	35	42	41	
Average percentage positive	47			23					41			42				

girls of 11–14, and the groups of girls 8–10 and boys 11–14 is real (significant at $P < 0.000001$).

If a positive X-ray is taken as a crude measure of the severity of an injury why do early adolescent girls present more frequently with minor complaints? The sudden fall in positive X-rays in girls of 11 years and over suggests that this is not a biological phenomenon. Local children move to senior school at 11 years and I suggest that this behaviour is learnt there.

A. LEAMAN

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Immunization against tetanus

Sir

The case report of tetanus in a 63-year-old female prompts me to report our experience of the immune status of patients in the Accident and Emergency Department.

Thirty-two consecutive patients, whose injury and history of inadequate past immunisation indicated the necessity for immediate passive tetanus immunisation, had a blood specimen taken prior to the injection of tetanus immunoglobulin and toxoid. Analyses showed that 29 of the 32 had no detectable antibodies to tetanus. These were all female patients over the age of 45 years who had, in the past, no access to routine immunisation procedures in childhood and, unlike many males in the same age group, had not served in Her Majesty's Forces, either during World War II or for the period of compulsory National Service. We have also noted that in the past 3 years increasing numbers of children under school age are presenting unprotected, because parents were apprehensive regarding the whooping cough vaccine, and, as a result, refused immunisation for their infants.

We regard patients in these age groups 'as at risk' and, unless they can provide confirmation of adequate immunisation procedures, usually resulting from previous injury, all are offered human tetanus immunoglobulin in addition to the first dose of tetanus toxoid course. No adverse effects have been recorded, but the necessity to complete the toxoid immunisation is emphasised as the efficacy of subsequent repeated doses of immunoglobulin alone has not been clinically tested.

Failure to administer immunoglobulin, which is available both commercially and from Blood Transfusion Services, has already been the subject of an action for negligence in the Courts, an action which I think is perfectly justified. Tetanus is a totally preventable disease. The optimum prevention procedure is active immunisation, but the ready availability of immunoglobulin associated with failure to offer it to the unprotected patient can only reflect lack of knowledge, inexperience on the part of the responsible medical officer or the failure to provide a standardised programme of protection against tetanus in our accident and emergency departments.

I have seen only one case of tetanus in 25 years, and the patient was known to be unprotected but refused immunisation by injection. He died.

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