abdominal complication occurred after severe gastro-enteritis but without any leak of the pyloroplasty, or peritonitis. This was a case of gross pyloric stenosis which I think in retrospect did not have sufficient cleansing lavage pre-operatively.

Advantages of Tubeless Regime

It is self-evident that the discomfort to the patient is much minimized by the absence of a naso-gastric tube and of intravenous drip apparatus. The patients are easier to nurse, and are encouraged to be out of bed for short periods from the first post-operative day. Out-of-bed activity is progressively lengthened each day, and so chest and thrombotic complications are minimized, and the psychological impression of rapid post-operative progress is a great encouragement to all patients. Sleep is much easier without tubes, because of the lack of a source of restriction to movement, and this also greatly aids rapid recovery.

Summary

A tubeless regime for gastric surgery is presented.
Its application to two series of cases is detailed.
Its advantages are briefly described.

REFERENCE

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Preliminary Communications

Seasonal Variation in the Clinical Onset of Leukaemia in Young People

There are references in the older literature to variations in the incidence of leukaemia with season—for example, Forkner (1938)—but recently there has been little interest in this, and the term "season" does not appear in the latest British monograph (Hayhoe, 1960). As part of studies of leukaemia in young people (Lee, 1961) details of a sample of cases reported to the National Cancer Registration Scheme of England and Wales were available, and examination of these suggested that the clinical onset of the disease was not evenly spread through the year. A more detailed study was therefore made, and the first results are reported here.

The National Cancer Registration Scheme started in 1946 with a few hospitals, and it has been steadily expanded. The procedure is that an abstract card is completed for each patient by the participating hospital, or regional centre, and is sent to the General Register Office, which operates the scheme. The cases of leukaemia in patients under the age of 20 which were reported during the years 1946–59 have now been analysed, except for about 10% where the cards had been sent back to the hospital for follow-up.

On the abstract card is a box, "Month of first symptom." This is completed by the hospital, and the month given has been taken as the date of clinical onset for the purpose of the present analysis. The distribution of the 1,671 patients aged 0–19 is shown in Fig. 1. There

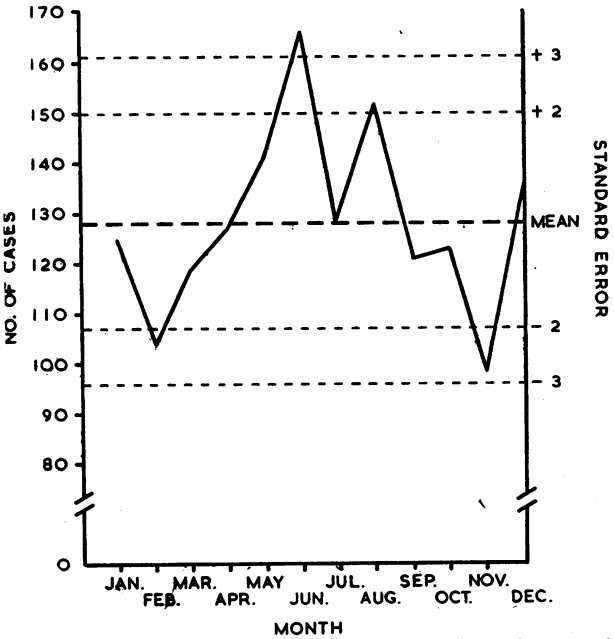

FIG. 1.—Month of clinical onset of leukaemia in patients aged 0–19. χ^2 30·24, D.F. 11, $P<0{\cdot}005$. The chance that the difference between an observation and its expected value will exceed twice the standard error is about 1 in 20. The chance that it will exceed three times the standard error is about 3 in 1,000. National Cancer Registration Scheme, England and Wales, 1946–59.

is an excess of cases with clinical onset in the summer, particularly in June. This distribution is unlikely to be due to chance. The excess of summer cases is smaller if the date of *diagnosis* is used rather than the date of *clinical onset*, and smaller again if the date of *death* is used. When the monthly numbers are corrected for variations in the length of the calendar months the excess in June over the monthly average is increased from 29 to 32%, while the excess in August drops from 18 to 16%.

The seasonal variation is found in both males and females. The summer peak was present in 1950–4 and 1955–9 (Table I), but was only doubtfully present in the small numbers of cases reported in 1946–9. Nearly all the cases in young people are acute, and removal of the 6.2% which were described as subacute or chronic does not alter the seasonal variations. The excess of cases beginning in the summer is found in each of the five-year age-groups from 0 to 19 (Table II). The summer peak is significant by the χ^2 test for the cases aged 5–19, but not for the cases aged 0–4, although, as would be

TABLE I.—*Cases of Leukaemia in Patients Aged 0–19 by Month of Clinical Onset. National Cancer Registration Scheme, England and Wales*

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Not Stated	Total
Acute*:														
1946–9	18	14	14	14	17	13	19	13	14	14	10	14	17	191
1950–4	46	33	46	43	51	52	35	57	29	40	34	52	29	547
1955–9	57	53	48	61	62	89	68	74	68	62	47	58	82	829
Subacute and chronic:														
1946–59	4	4	11	9	11	12	6	8	10	7	7	11	4	104
Total:														
1946–59	125	104	119	127	141	166	128	152	121	123	98	135	132	1,671

* Including cases where no details of the clinical course were given.

expected from the incidence of leukaemia, about one-third of the cases are in the age range 0–4.

The cell type was specified for 1,081 of the 1,671 cases. At ages 0–19 the summer excess was noticeable

TABLE II.—*Percentage of Cases of Leukaemia by Season of Clinical Onset*

Age	March–May	June–Aug.	Sept.–Nov.	Dec.–Feb.*	No. where Month of Clinical Onset Stated
Acute:					
0–4 ..	25·9%	28·8%	20·6%	24·7%	559
5–9 ..	21·3%	31·3%	23·4%	24·0%	367
10–14 ..	25·5%	27·5%	23·1%	23·9%	251
15–19 ..	26·4%	28·6%	22·5%	22·5%	262
Subacute and chronic:					
0–19 ..	31·0%	26·0%	24·0%	19·0%	100

* Meteorological Office grouping of months.

in the lymphatic cases but not in the myeloid (Fig. 2) or in the monocytic.* It is present in the cases of unspecified cell type.

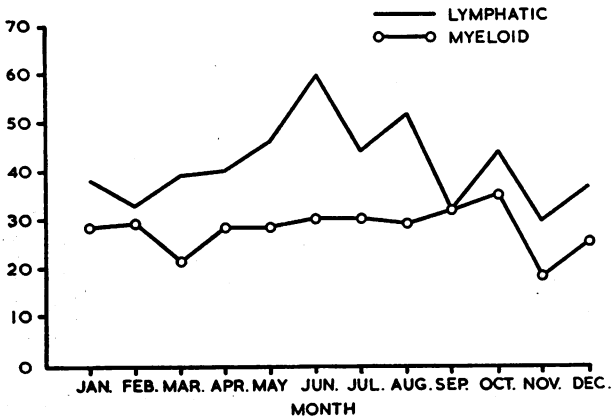

FIG. 2.—Month of clinical onset of leukaemia (excluding subacute and chronic cases). Stated to be lymphatic or myeloid. Patients aged 0–19. (Same scale as Fig. 1.)

DISCUSSION

No explanation of these variations in the onset of the symptoms of leukaemia with season can be offered. The leukaemias of different cell type are clinically very similar in children, and the apparent restriction of the seasonal variation to the lymphatic type suggests that the variations are in the genesis of the disease rather than in its progress or recognition. It is interesting that the recent possible "outbreaks" of leukaemia among schoolchildren in the Chicago area have been lymphatic in cell type (Heath, 1961; *Med. Wld News*, 1961). The study reported here was suggested by the evidence of Cridland (1961) that the clinical onset of Hodgkin's disease is most commonly in the winter, but leukaemia in young people seems to behave in a different way.

These studies are being extended to older age-groups. The distribution of the cases by small areas, and their possible grouping in time, will also be studied. We are analysing other cases collected under different administrative arrangements as a check on the possible production of artifacts by the working of the system used for the cases now reported. Clinical studies need to be done both on the reliability of the dating of onset and to see whether the mode of onset is relevant to the present problem.

* The numbers of cases of lymphatic leukaemia aged 0–19 reported in 1946–59 were: January 38, February 33, March 39, April 40, May 46, June 60, July 44, August 51, September 32, October 44, November 30, December 37. This variation is not significant by the χ^2 test, but if the more powerful test for cyclic trend (Edwards, 1961) is used, $P<0.01$. Apart from lymphatic leukaemia, this latter test gives similar results to the χ^2 test on the data reported here.

SUMMARY

Analysis of the dates of clinical onset of the cases of leukaemia in patients aged 0–19 reported to the National Cancer Registration Scheme of England and Wales has shown that more of the cases begin in the summer than in the winter, and that the incidence is at a peak in June. This variation is not restricted to any particular age-group within the range 0–19. The seasonal variation appears to be present in the lymphatic cases, but not in the myeloid.

ADDENDUM.—Since this report was written nearly all the cards which had been sent back to the hospitals for follow-up have been returned, and a few late notifications have been made. The distribution of all these additional cases by period of clinical onset is as follows: March–May, 29; June–August, 46; September–November, 29; December–February, 23.

The Registrar-General generously made the National Cancer Registration Scheme data available. I am most grateful to Professor J. N. Morris and my colleagues of the Social Medicine Research Unit for much help.

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Medical Memoranda

Preputial Calculi

Preputial calculi are extremely rare, and very few case reports are to be found in current literature. Two cases are reported here, one of which was a case of recurrent preputial calculi.

CASE REPORTS

Case 1.—An agricultural labourer aged 55 was brought to hospital at midnight in December, 1960, with acute urinary retention. Since childhood he had phimosis, and for several years had irritation at the penis and difficulty in passing urine. He had been aware of a swelling under the prepuce for a year. He had no children and some time ago had been divorced. He was in good health save for the above trouble. On examination his urinary bladder was full and tender. The preputial sac was very distended and the preputial opening was pin-point. Two foreign bodies and the glans penis could be felt separately in the preputial sac. The testes were drawn up near the symphysis pubis. When the preputial opening was pressed lightly with a fine probe urine began to ooze out. On circumcision two stones were removed from the preputial sac. The first was greyish white, oval, and faceted, having a maximum diameter of 2.5 cm. The second was also oval and faceted, the maximum diameter being 0.7 cm. The patient made an uneventful recovery.

Case 2.—An agriculturist aged 60 was referred for the treatment of preputial calculi in May, 1961. He had had