and the remaining three babies were born in quick succession, all three attached to one placenta. These weighed 1.5, 1, and 1.25 kg. respectively in order of birth. They all bore the same appearances of prematurity as the first baby born singly. The colour of all the babies was good, no abnormalities were found, and they moved and cried as newborn babies would do. About eight hours after birth the smallest of the four started an epistaxis and died. Thereafter the remaining three were similarly affected and within 12 hours all had died.

I am reporting this case by the courtesy of Dr. F. S. Musallum, Superintendent of the Red Crescent Hospital, Gaza, in the hope that it might prove of some interest to readers. Plural births above triplets are considered to be an extreme rarity and are said to occur once in 500,000 births, yet with a population of 300,000 refugees in the Gaza strip quadruplets have been born twice within the last 12 years. I was fortunate to have the privilege of being invited to see the quads.—I am, etc.,

Gaza.

J. E. R. HEPPOLETTE.

Insulin Resistance

SIR.—Dr. D. Hubble's case of insulin resistance in a young girl, by reason of its extreme severity and his beautiful description, will surely become a classic (*Journal*, October 30, p. 1022). As insulin resistance of such severity is not common, may I be allowed to record, for the sake of contrast, a case at the other end of life in a woman in her eightieth year whose clinical course was not very spectacular but whose insulin requirements were surprising?

A woman, born August 4, 1875, was known to have suffered from "heart disease." For some years she had been short of breath on slight exertion, and three years before admission there was a cerebrovascular episode resulting in right hemiplegia with only partial motor recovery. Twelve months before admission she complained of general and vulval pruritus. Sugar was found

ъ	Urine		Blood		Insulin		
Date 1954	Benedict	Acetone	Sugar mg. %	Time	Total Units in 24 Hours 160 P.Z.I. 200 P.Z.I. + soluble		
May 14	0000	+++	520	6 p.m.			
18	0000	++	385	11.50 a.m.			
•	1	·	405	3.15 p.m.	250	,,	,,
19	0000	++	334	11.50 a.m.	280	,,	٠, ,
	1 1		307	3.30 p.m.			
20	0000	++	377	11.50 a.m.	280	,,	,,
	0000		330	3.30 p.m.	360		
21	0000	++	338 405	11.50 a.m. 3.30 p.m.	300	,,	٠,
22	0000	1 1	403	3.30 p.m.	500		
23	OGYO	7.7	342	11.50 a.m.	500	••	**
23 24 25	OYYO	+++++++++++++++++++++++++++++++++++++++	328	11.25 a.m.	500	"	**
	0110	1	300	12.30 p.m.		**	,,
	1 1		385	2.30 p.m.	l		
27	0000	Nil	425	11.30 a.m.	500	••	,,
			395	12.30 p.m.			
	1 1		403	2.30 p.m.			
28	000G	,,	10.5		800	••	**
29	BGGY	,,	196	5 p.m.	450	,,	••
••	ango!		288	11 p.m. 10.30 a.m.	450		
30 June 8	GBGO	,,	190 285	Noon	400	,,	,,
une 8	0000	,,	295	3 p.m.	400	,,	,,
14	000G		255	11.50 a.m.	340		
14	0000	**	259	2.30 p.m.	340	,,	,,
17	BBBG		177	2.45 p.m.	300	,,	
18	GBBG	,,	144	11.50 a.m.	300	,,	,,
19	GBGY	,,	203	11.45 a.m.	300	••	••
.,	5501	,,	212	3 p.m.			

in her urine, and a modified diet and insulin therapy was begun. To her doctor's surprise her requirements became very high, but as she lived in the country, and had to rely on the district nurse for her injections, protamine zinc insulin had been given alone, and at the time of her admission she was having 160 units each day before breakfast. She was admitted to Leicester Royal Infirmary on May 14, 1954. Thirst, pruritus, insomnia, and polyuria were her complaints in that order of magnitude, but she was intelligent and well orientated and co-operative, taking her food but having difficulty in swallowing it because of her very dry (brown) tongue. There was heavy glycosuria, acetonuria, and a blood sugar at 6 p.m. of 520 mg.%. There was enlargement of the heart and pulmonary hyperaemia as confirmed by x-ray. Blood pressure 220/110. The liver was palpable below the costal margin, there was no gross ascites, but there was oedema of both feet. She had residual weakness in her right arm and right leg.

There was no evidence of hyperthyroidism and she was afebrile. The course of her diabetic control is most easily followed in the table.

It was remarkable in that splitting her insulin dosage into three daily injections and replacing part of the total dose by soluble insulin did not have the expected effect, and, whereas the average sensitive diabetic patient's insulin dose is changed by only 2, 4, or 6 units, we eventually grew so bold as to change this patient's dose by 100 units on each of the three daily injections without disaster, and only when this was done and by bringing the total dose to 800 units on one day did she respond and thereafter remain controlled on a lower level. At this point there was very mild hypoglycaemia amounting to sweating and feeling a little faint, but this did not recur, and for the last week of her stay in hospital, on 300 units of insulin in a single dose (200 soluble, 100 P.Z.I.), she remained free of glycosuria and was rid of her symptoms-even her long-established insomnia improved. Death occurred on September 20, 1954, following another cerebral catastrophe.

At present, I am sure, one can only ponder over the cause of these aberrant cases of extreme insulin resistance and the very different clinical effects in the young girl and in the old woman. As in the cases noted by Marble, there seems to be no one thread to link them, unless it be the hypothalamus.—I am, etc.,

Leicester.

JOAN B. WALKER.

REFERENCE

¹ Treatment of Diabetes Mellitus, 1952. Kimpton, London.

Laryngeal Spasm

SIR,-Your annotation (Journal, November 6, p. 1097) refers to an appalling case of laryngeal spasm where the anaesthetist failed to intubate and where the surgeon failed to do a tracheotomy. Fortunately, we only meet these cases occasionally, but I find that there are a considerable number of young anaesthetists who have not had any specific instruction in this matter. May I therefore offer the following tips, for which I claim no originality? (1) In the case of severe spasm with cyanosis, a small amount of succinylcholine might be given to facilitate ordinary intubation, but if the peripheral circulation is failing it may never get a chance to function. (2) The ordinary gum elastic catheter can be forced through the cords fairly easily, particularly if a straight laryngoscope of the so-called McGill type is used, and by this means oxygen can be insufflated. (3) In the event of the laryngeal obstruction being due to diphtheria or a malignant growth, through which one would be reluctant to push a catheter, and where a formal tracheotomy is indicated in any case, much valuable time may be saved by piercing the trachea at or below the cricothyroid membrane with a fine needle, and a 20-ml. syringe may be repeatedly filled with oxygen and this injected in the trachea below the obstruction. I have ascertained that a 22 B.W.G. needle 2 in. (5.1 cm.) long, if connected by stitch tubing to an anaesthetic machine by an ordinary endotracheal adapter. will carry oxygen at the rate of 2 litres per minute. would allow the moribund patient to recover and for a formal tracheotomy to be done under a local anaesthetic, provided that one bears in mind the ever-gathering accumulation of carbon dioxide, but this probably with the adequate oxygenation would relieve the spasm sufficiently to allow a fair amount of the CO₂ to be exhaled, particularly under the oxygen pressure.-I am, etc.,

Northampton.

F. F. WADDY.

POINTS FROM LETTERS

Pain on Swallowing .

Mr. T. J. Wilmot (Omagh, Co. Tyrone) writes: I was interested in the letter of Dr. J. Kohn on pain on swallowing (Journal, November 6, p. 1105), with which I am in entire agreement. I am frequently consulted by colleagues for cases of obstinate tonsillitis, and always insist on the patient drinking, in the presence of another member of the family, a full glass of liquid in large gulps before I leave. Pain is always less than the patient anticipates; he is encouraged to drink more, and the condition usually resolves with rapidity. I feel that this simple measure is often more important than the prescribing of drugs for simple tonsillitis.