The records of all the patients completing the experiment are available for testing the provisional conclusion (drawn from Tables II and III) that propantheline has failed to influence the result of the routine treatment. Table IV shows that there is no significant difference between the number of dry and wet nights during each child's month on either two tablets of propantheline (30 mg.) or two tablets of the placebo.

TABLE II.—*Treatment Group. Number of Dry Nights in Consecutive Four-weeks Periods*

Case	Tabs. 0	Propantheline		Placebo Tabs. ii	Follow-up
		Tabs. i	Tabs. ii		
B	14	27	26	28	28
D	10/21	8	19	22	27
F	16	14	20	22	9*
H	—	22	†	—	20/21
J	23	20	23	23	24
L	14	16	6 6†	—	18/21 28/28
N	14	11	9	±	—
P	—	13	14	23	17
R	0	0	0	±	—

A fraction indicates less than four weeks' observation: 10/21 = 10 dry out of 21 nights.

* Postal follow-up, family moved from district.

† Patient refused tablets.

‡ Failure of treatment, case eliminated from series.

TABLE III.—*Control Group. Number of Dry Nights in Consecutive Four-weeks Periods*

Case	Tabs. 0	Placebo		Propan- theline Tabs. ii	Follow-up
		Tabs. i	Tabs. ii		
A	9	14	24	22	27
C	24	19	19	†	22
E	—	25	19	25	28
G	3	2†	±	—	—
I	3	18	14	16	18
K	5	15	14	11	15

†† As Table II.

TABLE IV.—*Comparison of Performance on Propantheline, 30 mg., and Placebo of all Cases Completing Course*

		Treatment (Propantheline Tabs. ii each night)	Control (Placebo Tabs. ii each night)
Dry nights		176	189
Wet ..		76	63

Discussion

Though these results show no advantage of propantheline over an inert tablet of similar appearance it does not necessarily follow that propantheline is of no benefit in the treatment of enuresis. Some effect might have been demonstrated, for example, if a larger dose had been used. Dr. Kenneth Holt (personal communication) has found that larger doses can be given to enuretic children without producing side-effects. If the dose used were suboptimal the younger children in this series, receiving higher body-weight dosage, might show benefit. This is not apparent: there were only three children under the age of 6; they scored a total of 60 and 66 dry nights on two 15-mg. tablets of propantheline and two blank tablets respectively.

It will be appreciated that had the result been less definite this relatively crude experiment could only have served as a pilot study. Had the results suggested any slight advantage of propantheline over the control treatment the significance of this advantage would need to be established by a larger series of patients or a more sensitive experimental plan.

There are two conclusions to be drawn from this experiment. That the observed improvement is due to some other factor than propantheline; and that the routine treatment, with its confident emphasis on the child's ability to be dry at night, achieves its purpose.

Perhaps one may also venture a personal opinion. It seems possible that propantheline has had an indirect

influence upon these results by its effect upon the manner in which the routine treatment was presented. So tedious does the ever-present problem of enuresis become to those who conduct paediatric out-patient clinics that anything that rekindles a waning interest in the problem has a marked stimulating effect upon the interest with which cases are welcomed, and so it may enhance the value of the simple psychotherapy-by-suggestion that is the basis of the routine treatment. Every critical appraisal of new treatments for enuresis must take account of this possible effect.

Summary

Treatment of a small series of cases of simple nocturnal enuresis in children is described. The effect of propantheline, 15 and 30 mg. every night, is compared under controlled conditions with an apparently similar but pharmacologically inert preparation. The improvement observed in the majority of cases seems to be independent of propantheline treatment; that is to say, no significant effect ascribable to the drug has been demonstrated.

Grateful acknowledgment is made to Messrs. G. D. Searle and Co., Chicago, manufacturers of pro-banthine, for the supply of both the active and the specially prepared inert tablets; to Mr. F. Marshall, hospital pharmacist, for his help with the records; and to Miss B. J. Bird, secretary, for tabulating the results.

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CASE OF UNIUMBILICAL-DIBRACHIDICEPHALIC MONSTER

BY

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Obstetricians and others have always been interested in anomalies of foetal development, and consequently the literature on human malformations and monsters is quite extensive. However, the incidence of dicephalic monsters is low and the statistics of their occurrence are not particularly accurate. For these reasons the following case is reported.

Clinical History

The mother was a healthy Hainanese woman aged 44, and this was her third pregnancy. The previous two had been normal and had ended in the live births of two male children, 20 years and 5 years ago respectively. She had not received any antenatal care, and was admitted to the Kangang Kerbau Hospital on August 24, 1955, in labour. Two days previously she had had a small painless vaginal haemorrhage. The last menstrual period was stated to be November 26, 1954, making the estimated date of delivery September 2, 1955.

On examination she was established in labour. The size of the abdomen corresponded to the period of amenorrhoea, though there was some degree of hydramnios. The breech was presenting and a foetal heart was heard and regarded as normal. Labour progressed quickly, and four hours after admission the breech was distending the vulva. Spontaneous delivery of the breech with flexed legs followed quickly, but

advance ceased with what felt like a large hydrocephalic head impacted in the pelvic brim. A vaginal examination was made, and, although the true condition was not recognized, the lifting forward of the body enabled the posterior head to enter the pelvis and be expelled, and the second or anterior head followed without difficulty. The third stage was normal. The placenta was single with a centrally situated cord. From the position of the rupture in the membranes the placenta was thought to be praevia type 1.

The dicephalic monster was stillborn and weighed 4 lb. 8 oz. (2,040 g.), the sex being female (see Figs. 1 and 2).

Post-mortem Findings

The dissection was limited to the thorax and abdomen so as not to spoil the specimen, which is being preserved.

The body was that of a female with two well-shaped heads and necks set on a single pair of somewhat broad shoulders. The faces looked identical. The fontanelles and sutures were normal for the stage of maturity. The right head was faceted in the temporal area by the left one, which was slightly larger in all diameters. An x-ray film of the foetus showed two well-differentiated vertebral columns which continued down to the sacra and were held together, at each rib-level, by a small mutual rib joining the two vertebrae so that a large thoracic cage was formed by the lateral ribs of each side and the bridging element (Fig. 3).

In the thorax each trachea connected with a complete set of lungs. There were two hearts. The one on the left appeared normal, and a pulmonary artery went to the left set of lungs. The heart on the right side was bilocular and smaller. From its auricular aspect arose a poorly defined aorta and a pulmonary artery which was directed towards the right set of lungs. From the left heart a relatively normal looking aorta rose into the left foetus and then descended normally to the lumbar region.

The right oesophagus ended blindly in a fibrous cord about the level of the third dorsal vertebra, while the oesophagus on the left side passed into a stomach of the type usually seen and situated in the left aspect of the abdomen. The intestine appeared normal. The liver was large and at first appearance double, but there was thought to be

was only one gall-bladder. There were two kidneys and adrenals, and one spleen. The pelvic organs looked normal.

Comment

A monster is any organized form of life in which there is lack, excess, misplacement, or distortion of parts or organs (Potter and Adair, 1949). The present case comes into the class called terata anadidyma (Förster, 1861). In this group fission or doubling is from the head downwards. Identical twins are now generally accepted to be the result of two blastomeres resulting from complete separation after the first segmentation. If the separation is incomplete a double monster will result. Any circumstance or agent which depresses or alters life in the blastocyst stage, especially in the region of the primitive node, gives rise to irregularities in development, and double monsters have been produced experimentally by various means. However, there is no evidence that nature produces monsters by the same methods as the experimental biologists (Wilder, 1908). Some authorities believe that they are the result of the fertilization of the ovum by more than one spermatozoon or the occurrence of an ovum with more than one nucleus.

Mall (1908) differentiates between monsters that are germinal in origin and those where some external influence has affected the developing normal ova. He states that "seven pregnancies out of every 100 give pathologic ova of which but one-third give well-formed embryo monsters, or 2% of all pregnancies. The number of monsters which go on to full term is about 0.6%. The embryonic and foetal monsters form, therefore, 2.6% of all pregnancies, or, in other words, three well-formed monsters are aborted in the early months of pregnancy for every one that goes on to the end of pregnancy." Fortunately, the majority of these are stillborn or, if born alive, soon die. Occasionally monsters survive and continue their existence either in a side-show of a circus or in an institution. A classic case of this type of double monster is the Scottish brothers who lived during the reigns of James III and James IV, and reached the age of 28 years.

From the obstetrical point of view the usual sequence of events is for the diagnosis to be entertained only when labour has been in progress for some time and the second stage does not develop as expected. The latter occurred in this case. However, as the foetus was not large delivery was accomplished without difficulty. Foetal abnormality should always be suspected when, with the os fully dilated and the pelvis normal, a little more than the usual amount of traction on the foetus fails to move it, or when there is arrest after the head or breech is born (Sheares, 1941).

An interesting aspect of this case was the small antepartum haemorrhage two days before the onset of labour, and the finding of a type 1 placenta praevia. If the patient had come into hospital at this time, a diagnosis of placenta praevia might have been entertained and in consequence an x-ray picture of her abdomen been taken, as there is a definite association between this condition and foetal abnormalities (Greenhill, 1923).

The hydramnios would have been another indication for radiography. Nowell and Owen-Jones (1947) report a case of dicephalic monster clearly defined radiographically before

FIG. 3.—Antero-posterior radiograph of the foetus after delivery.

FIG. 1.—Anterior view of foetus and placenta.

FIG. 2.—Posterior view of foetus.

delivery. While only of remote value in obstetric diagnosis, radiography is desirable in all cases in which any deviation from the usual is suspected. If a foetal monster is then detected the pregnancy should be terminated by induction of labour, or by caesarean section if the condition is not recognized until labour is in progress and the monster is large.

I am indebted to Professor B. H. Sheares for permission to report this case. My thanks are due to Mrs. Patterson, radiographer, Kandang Kerbau Hospital, and Dr. Lim Kee Loo, radiologist, General Hospital, Singapore, for their co-operation in the radiological work involved; to Mr. Austin Bennett for the photography; and to Miss Rita Rodrigues for the clerical work.

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SILICONE BARRIER CREAM IN PREVENTION OF BEDSORES

BY

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The prevention of bedsores in bedridden patients is a problem which demands more time and attention from hospital nursing staff than perhaps any other treatment. In hospitals for chronic cases and geriatric units, where some of the patients are permanently confined to bed, and in addition are often incontinent of urine and faeces, the duty hours of one nurse may be spent entirely in carrying out a succession of "back rounds."

Prevention is usually along established lines, which include the washing of pressure areas with soap and water, drying, and rubbing with spirit to harden the skin, dusting with powder to absorb surplus moisture, and frequent changes of position.

In this geriatric hospital the above routine has been carried out five times daily on every bedridden patient. It was observed that patients who had been long bedridden at home were admitted with pressure areas in fairly good condition. However, after a short time in hospital, sometimes as little as a few days, they developed bedsores. This was attributed to: (1) washing the back with soap and water, inadequate drying; and rubbing the back with spirit; and (2) an increase in disorientation and incontinence, which often follows a change of environment in the elderly.

It was thought that the devitalized atrophic skin of the aged suffered damage from rubbing with spirit, and the powder used tended to cake in skin creases, thus causing irritation.

A further cause was probably the heavy sedation at one time imposed on first admission, when previously quiet patients became restless and unmanageable owing to the change of environment. This factor has been lessened by the use of chlorpromazine, which has been found to make many cases of senile confusion manageable without rendering them unconscious. The main causes of bedsores are pressure, rubbing, and maceration with urine and other body fluids.

Method

Frequent washing with soap and water and rubbing with spirit were therefore discontinued, and the following regime was instituted six months ago, and has been in routine use at this hospital since. (1) The position of the patient is changed at least five times daily. (2) The skin is washed with soap and water as infrequently as possible. Pressure areas are washed only twice a week, or whenever they become fouled, when they are washed with warm water alone and carefully dried. This washing does not remove the silicone barrier-cream that has been applied. (3) Silicone vasogen ("lactagol") is smeared thinly and evenly on pressure areas twice daily for a week, then once daily. (4) All patients are prescribed tolazoline 25 mg. t.d.s. and vitamin C 50 mg. t.d.s.

Tolazoline was first introduced in an attempt to improve the skin blood supply generally. It was discontinued for a period of six weeks, and in that time two new bedsores developed.

Established bedsores are treated on orthodox lines, but silicone vasogen is applied to the surrounding whole skin.

The condition of the pressure areas of each patient is noted on a special chart on admission, and re-examined weekly. The classifications used are as follows: reddening of skin, gangrene of skin, loss of skin, and destruction of deeper layers. In each case the area involved is traced on thin paper.

Silicone vasogen, which consists of 20% polydimethylsiloxane in a water-soluble base, has been found to be the most pleasant and economical in use. "Siopel" is slightly less expensive, but contains only 10% of silicone compound.

Silicone vasogen is also used routinely to protect the skin surrounding suprapubic cystostomies, and to protect preputial skin in cases of prostatic dribbling.

Impressions of Pilot Survey

Since the introduction of this routine the incidence of fresh bedsores has been lower than before. This statement is based on personal observation and on reports from the nursing staff. No case of skin sensitization or conjunctivitis in patients or in nurses has been observed since the use of silicone vasogen was begun.

However, the greatest advantage is in the saving of time, and the nursing staff is enthusiastic about this. There are 120 beds in this institution, and on an average 40 are occupied by completely bedridden patients. When the old method of prevention was used, employing rubbing with spirit, 25 minutes a day was spent on each patient. With silicone vasogen, and changing the patient's position in bed five times daily, it is estimated that 15 minutes a day is spent on each patient. This results in a saving of 10 minutes a day for each patient, or, in the case of this hospital, 400 minutes (6 hours 40 minutes). This is tantamount to increasing the hospital's nursing staff by one nurse.

In the Colchester Hospital Group there are 350 beds for chronic cases. The incidence of bedridden patients is about 33.3%. The employment of this method throughout the group would save 20 hours' nursing time every day. In view of the difficulties of obtaining nursing staff in chronic and geriatric units, it is felt that this economy of labour justifies the employment of the method even if it can be shown to be no better than the orthodox system.

Cost.—At this hospital one 500-g. container of silicone vasogen is used each week at a cost of 35s. Tolazoline B.P. costs 58s. for 100 25-mg. tablets, and vitamins are in any case given as a routine to elderly patients. The weekly cost per patient is thus 10½d. for silicone vasogen and 1s. 2½d. for tolazoline.

Summary

A new method of preventing bedsores is described, using a silicone barrier-cream in place of the usual method of rubbing with spirit.