a week, then three times a week, then on alternate days, then daily. I have taken 0.1 g. daily now for approximately eight months, and the results are about equal to those of quinine or mepacrine.

As regards those under my care, the result has not been happy. In the highly malarious port of Bonthe during 1947 I advised those Europeans who consulted me, and who were taking quinine or mepacrine, to try paludrine in the recommended dosage of 0.1 g. twice a week. Three went down with smart attacks of malaria within a month, parasites being found in one instance. Other Europeans suffered less severe attacks under the same regime; parasites were found in one case. Those who wish to take paludrine I now advise to take 0.1 g. daily. A number of Europeans have returned to their former quinine or mepacrine, and I am not now advising those already taking these drugs to change to paludrine if they are satisfied. Except in my own case, I have not been able to follow up the after-history of those taking 0.1 g. paludrine daily.

Therapeutically paludrine seems at least equal to quinine or mepacrine, though I prefer to give two 10-gr. (0.65-g.) doses of quinine at the start of an attack, giving at the same time 0.1 g. paludrine three times a day, and continuing with it in this dosage for ten days. I do not say that initial dosage with quinine is a necessity, but it still seems the best drug to bring down the temperature quickly.

In spite of this not very eulogistic account of paludrine, nevertheless I prefer it both prophylactically and therapeutically to either quinine or mepacrine. In the highest dosage tried, that is 0.1 g. prophylactically and 0.1 g. therapeutically once and thrice daily respectively, it is certainly not inferior to the other drugs and has the advantage of being apparently free from any toxicity in the therapeutic dosage tried. I can myself carry on with my full activities after at most 48 hours' treatment, and usually earlier, and I have had no complaints of unpleasant reaction from patients. The same cannot, emphatically, be said of quinine, and not always of mepacrine. Its freedom from dyeing the skin is also an advantage of paludrine.

Paludrine is a valuable drug which should not be allowed to fall into disrepute when it may be that merely a change in dosage and/or régime may be required. I see the manufacturers have altered the recommended dosage somewhat; but 0.1 g. twice a week would not seem to presage much improvement, since in my own case even 0.1 g. daily is not completely protective. I propose to try 0.3 g. in one dose once a week (as also recommended by the manufacturers) and work from that. It may be that a comparatively large dose taken once or twice a week may work better. I might add that in my own case and that of a number of others an attempt was made to sterilize the blood first with a full therapeutic course of 0.1 g. paludrine thrice daily for ten days before continuing with it prophylactically; but I have not found this makes any difference. The air wants clearing as regards this drug, and I should be grateful for the opinion of practitioners of experience.—I am, etc.,

Shenge, Sierra Leone.

E. S. WALLS.

Odd Legs

SIR,—Although I did not read Dr. Nestá H. Wells's original letter, the communication of Captain Robert Fuller and Lieut. Douglas L. Woolf (July 10, p. 109) interested me personally, since at the age of 12 years I was sent to see the late Mr. T. H. Openshaw about the increasing deformity of my left foot due to infantile paralysis, and he pointed out to my parents that the 3/4 in. (1.9 cm.) shortening of the limb was causing curvature of the spine. I remember thinking that a spine anyway was pretty much given to curvature, but my parents obediently saw to it that my left heel was raised 1/2 in. (1.3 cm.) and my right heel lowered 1/4 in. (0.63 cm.). At that time I also had some sort of a tarsectomy done to stabilize the ankle, and incisions in the plantar fascia—the whole procedure being to correct a fairly well marked equino-varus deformity. The boot prescribed was of the customary type with an iron up the inner side.

Two or three years later my head master, Dr. J. R. C. Greenlees, seeing my keenness for chasing balls and recognizing perhaps the possibilities of an exceptionally powerful right leg, suggested that I might take up rugby again. The late Sir John Fraser, whom I consulted, did not forbid me, and he pointed out to my parents that the contractures of the calf muscles had exactly compensated for the shortening of the leg. I could not of course stand to attention with both heels on the ground. I presume, therefore, that it was fortunate for me that the plantar and not the dorsiflexors of the foot were paralysed. By

a simple adaptation of the boots I was able to continue playing full-back at school and later for my hospital ward. In the same way cricket, hockey, etc., presented no difficulty. Tennis, however, proved a problem, since on no type of court are boots welcome. For some years I wore a galosh over my left boot, but after a time, when I found I could not beat the other members of the family, I became exasperated. So taking an old worn-out boot I performed a Syme's operation on it and began to wear an ordinary gym shoe together with the "stump" in order to give my ankle support. It was entirely successful.

During six years in India I very soon—after about five weeks—gave up any attempt at wearing boots, because of the heat. I had a modified pair of sandals made which were very comfortable and light, and were ideal for ordinary hospital work. However, after six years of sandals I found that my original footwear was intolerable, so I searched Edinburgh for a boot which would give me some of the advantages of those sandals; and now I get "odd" factory-made boots, the left being two sizes smaller than my right. Since my left boot pre-war cost about £5, this is also a considerable saving of expense. The fact that I must wait 3–5 months for delivery might seem a disadvantage, but I sometimes waited nearly that long for a boot to be specially made for me.

No doubt over the past 15 years facilities have vastly improved and ideas become more generous in their outlook. It is our job to see that the "lame man shall leap as an hart" and that "the tongue of the dumb shall sing"—even if the lameness and the dumbness remain. Better a deformed limb useful than a straight one loaded down with theory.—I am, etc.,

Edinburgh.

M. LUDLAM.

Vaginal Injury at Coitus

SIR,—The following case of a vaginal vault injury due to normal coitus in a young parous woman may be of interest in view of a previous article in the *B.M.J.* of April 24 (p. 786).

CASE REPORT

A tall, well-developed married female of 17½ years old, 1-para, 3½ months post partum, was admitted complaining of severe haemorrhage per vaginam which had begun during intercourse. She also complained of slight pain in the lower abdomen. The incident occurred one hour before admission.

Her period had been due on the day of admission, but the present loss was in no way like her menstrual loss, being much more rapid, with brighter blood, and of sudden onset. Pulse rate 116, and of diminished volume; respiration 24; temperature 99° F. (37.2° C.); B.P. 115/80. The patient was pale and conjunctivae were poorly coloured. The abdomen was soft and there was very slight tenderness over the pubis. The uterus was not palpable per abdomen. Per vaginam the external os was closed and the cervix was firm and "non-pregnant." The vagina was packed with gauze in the receiving ward, and the patient was sent to theatre.

The possibilities considered were trauma, abortion, and sub-involution of the uterus. Instructions were given to "lay up" for a possible repair, vaginal packing, or dilatation and curettage. The patient was examined under a general anaesthetic and the introitus was found to be of a parous type, with a small amount of unrepaired perineal tearing at delivery. An Auvarud speculum was inserted and inspection showed the vaginal vault to be somewhat relaxed. The cervix was closed and not bleeding. High in the posterior fornix there was a linear laceration 2 in. (5 cm.) long, extending from one lateral fornix to another across the vault. The floor of the laceration was composed of vascular cellular tissue, and peritoneum was not visible. The vulsellum forceps were transferred to the posterior lip of the cervix, and by holding this up excellent exposure was obtained. Eight No.-1 catgut interrupted sutures co-aped the edges and completely arrested the haemorrhage. The area was sprayed with penicillin powder.

The patient made an uneventful physical recovery, although there appeared to be a certain amount of residual emotional trauma. Haemoglobin on the fourth day was 66%. She was discharged in seven days.

DISCUSSION

The patient was interviewed both on admission and after operation in regard to the use of artificial appliances, birth control apparatus, etc. The use of these was denied with apparent honesty and sincerity. The husband was also interviewed separately, and bore out his wife's statements. Intercourse was in the dorsal decubitus position. The husband permitted examination of himself, and there was no undue enlargement or distortion of the parts. The patient was a tall well-built woman, and there was no question

of disproportion. Factors which might contribute to this accident are those which depress the fornix. A shortened perineum from severe perineal tears would diminish the height of the vaginal vault. Uterine prolapse with or without rectocele would predispose similarly. Physiologically a simultaneous contraction of abdominal wall and diaphragm would raise intra-abdominal pressure and momentarily depress the pelvic diaphragm.

Another factor to be considered is the part her recent pregnancy may have had in softening and vascularizing the parts. Since this case I have heard of another similar one at 6 weeks post partum. On the other hand a case is described by Nicholls of an adult female with similar injury 8½ months post partum, when complete involution should have occurred. Three cases are described in the *Medical Journal of Australia* of 1919, two by D'Arcy, and one by Stokes. Other similar cases are described by Anspach, Ricciardi, and numerous others. All cases are characterized by haemorrhage severe enough to threaten life and which usually requires surgical repair for its arrest. The literature contains a goodly number of cases of this type, but most textbooks devote only a few lines to this subject, if it is mentioned at all.

The leading textbooks describe coital injuries as occurring primarily at the vulva and hymeneal areas, and sometimes extending upwards from this. Injuries high in the vagina are usually said to occur in old women or young girls.

I should like to express my thanks to Dr. C. D. Coyle, Medical Superintendent of the Archway Hospital, and Miss Harding, consulting gynaecologist, for permission to publish this case.

—I am, etc.,

London, N.19.

MORTIMER BURDMAN.

BIBLIOGRAPHY

- Anspach, B. M. *Philadelphia Hosp. Rep.*, 1908-9, 7, 164.
Gynecology. Philadelphia, 1934.
 Blair-Bell, W. *Principles of Gynaecology*. London, 1934.
 D'Arcy, C. E. (1919). *Med. J. Aust.*, 1, 172.
 Dickinson, R. L. *Human Sex Anatomy*. Baltimore, 1933.
 Eden, T. W., and Lockyer, C. *Gynaecology*. London, 1935.
 Nicholls, R. B. (1946). *Amer. J. Obstet. Gynec.*, 52, 500.
 Stokes, E. H. (1919). *Med. J. Aust.*, 1, 111.

Use of Ring Pessaries

SIR,—During the past three years I have reviewed a large number of old women, some not so old, who have collected as the ragtag and bobtail of my out-patients and form that neglected and pathetic army dealt with haphazardly by the house-surgeon or the out-patients' sister—the “ring pessaries.” It will be comment enough, I think, to report that this large army has now been reduced to three. Fifty-seven have undergone some form of colporrhaphy or vaginal occlusion, their ages ranging from 37 to 84, with a mortality of *nil* and a happiness of 100%. Fourteen have had their rings removed—they were unnecessary. Of the remaining three, two are quite unfit for operation and the third prefers to lead her ring life. It would seem, therefore, that three out of seventy-four ring pessaries were necessary, somewhat less than 5%. This percentage, in terms of the whole country, indicates at least the urgent need for a critical review, and it is therefore desirable to lay down the conditions in which ring pessaries should be used.

A ring pessary is the facile answer to any woman complaining of a bearing-down feeling, though this may be due to anything from a cervical polyp to a urethral caruncle. There is therefore great necessity for an accurate diagnosis, or even an “eliminating” diagnosis. There are three types of cases to which rings are generally fitted. The first, and probably the most pathetic, are the young women who have descent of the vaginal walls in the immediate weeks following childbirth. The usual train of thought is that these walls must be supported until the “involution” of the vaginal tissues reduces the “prolapse.” This is an outstanding example of muddled thinking. A ring pessary, surely, if it has any effect, produces this by stretching the vaginal walls. To apply a ring in these cases is therefore to produce the very condition we wish to avoid, apart from the mental, physical, and marital discomfort that accompanies its use.

The second type of case is the middle-aged woman in which there is permanent descent of one or both vaginal walls. To them the ring pessary is fitted in their thousands without reference to the relative degrees of uterine or vaginal prolapse, to the presence or otherwise of stress incontinence, which no ring could possibly cure or help, and very often without reference to the state of the cervix. I have seen more than one carcinoma of the cervix treated with a ring pessary. The truth is that the doctor is in a difficult position. Although he may feel that a surgical cure of the prolapse is desirable, the woman, because of domestic difficulties, fear of operation, and so on, declines his advice, and his only alternative is to fit a ring, which of course does bring comfort in many cases.

The third type of case is where, because operation is out of the question, a ring pessary is the only treatment. May I plead,

therefore, that ring pessaries, except perhaps in this last category, with their stink and their dangers, be put on the bonfire of last year's gynaecological garden? May I plead with even more entreaty that the Hodge pessary in the treatment of “retroversion” be put away altogether and for ever from our minds and our uses?—I am, etc.,

London, W.1.

MORTIMER REDDINGTON.

Antenatal Care

SIR,—There has been a great deal of correspondence in the medical journals and in the daily press on the relief of pain in childbirth, and it is generally agreed that fear and anxiety often lead to a painful and difficult labour. The best way to allay the apprehension which many women have towards their confinement is for them to know and have confidence in the doctor or midwife who is going to undertake their case.

The main purpose of antenatal care is, I consider, not only to diagnose and treat any abnormalities, but to get to know the mother, to allay her fears, to confound the old wives' tales, and, as the time of delivery approaches, to gain her complete confidence, which will lead to co-operation in the actual labour. There seems to be a tendency nowadays to allow antenatal care to become a cursory affair. The National Health Service (General Medical and Pharmaceutical) Regulations, 1948, state on p. 16 that “in the case of maternity medical services all proper and necessary treatment shall include advice in regard to antenatal supervision; antenatal care including an initial medical and obstetric examination and an examination at the thirty-sixth week of pregnancy or at any time that the practitioner thinks necessary.” In other words, the doctor can attend a mother in labour after having met her only twice before. Antenatal clinics held by some local authorities seem to be run on these lines. One case I sent up with a letter asking to have an abnormality investigated was turned away by a clerk because she was only three months pregnant. Another case, thirty weeks pregnant, was told that she need not attend again until labour commenced.

Some years ago I was a resident obstetric officer at an L.C.C. hospital where we had a large maternity department and ran our own antenatal clinics. We asked our mothers to attend every month up to the seventh month, every fortnight during the eighth month, and every week for the last month of the pregnancy. During this time the mothers got to know the doctors and nurses well, and they were no strangers to us when they came into the hospital for their confinement. Our forceps rate over a series of about 600 deliveries was only 6%.

I have continued to carry out antenatal care on the above lines and have found that the knowledge and friendship obtained from these frequent consultations produces confidence and co-operation during labour, into which the mothers enter quietly and calmly and mentally at ease. This produces the relaxation which appears to be so necessary in alleviating the pains of labour. The analgesics, especially pethidine, have far more effect under such conditions. If I am allowed to continue the practice of midwifery under the new health service I shall see my patients just as frequently, for then I too can approach a confinement with the assurance that I am going to deliver a mother who, knowing me, will do her best to co-operate with me in a spirit of happy anticipation.

May I conclude by saying that the utility maternity service provided by the Ministry of Health at £7 7s. a time (cheaper quality £5 5s.), in which a doctor is required to see the mother only twice before labour and to attend at the confinement only if he thinks necessary, is not likely to lead to the utopia of painless childbirth which certain correspondents in our popular press would have us believe has been attained by our colleagues on the other side of the Atlantic.—I am, etc.,

Gidea Park, Essex.

J. G. FIFE.

Comprehensive Child Health Service

SIR,—May the following suggestions be brought to the notice of those interested in the development of a comprehensive child health service in this country? Our child health service, although better than in most countries, is still in its embryonic state. Nevertheless there is already an odd maldevelopment taking place—hereditary perhaps from the days when paediatrics formed a minor part of obstetrical teaching. This anomaly, I feel, is of an importance which cannot be sufficiently emphasized and which, allowed to develop, may for ever prevent the establishment of a satisfactory child health service. I am