Dr. Dintenfuss has shown, I think conclusively, that this elastic property of cartilage is as operative during motion as during rest, and that it is ancillary to the lubricant function of the synovial fluid. His theory completes my own and supplies that evidence I was unable to provide.

My reason for stressing all this is that during moderate or quick motion, anyway, there will be some flow of the lubricant synovia between the fixed and moving surfaces because of that adhesion of the fluid to both these surfaces implied (though not sufficiently stressed) in my own writing as well as by C. W. McCutchen's theory.⁵ This calls for a streamlining of the internal surface of the joint. My main contention has always been that the general and particular internal mechanisms of the synovial joints are to assist, rather than hinder, such a streamlining. It is a unifying concept of articular structure and the only one that appears to embrace all and not merely some of the facts of anatomy and function. The term "elastohydrodynamic" expresses succinctly how a hydrodynamic lubrication is achieved in joints.—I am, etc.,

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- ² — *J. Bone & Surg.*, 1963, 45A, 1241.
- ³ MacConaill, M. A., *ibid.*, 1951, 33B, 251.
- ⁴ — *ibid.*, 1950, 32B, 244.
- ⁵ McCutchen, C. W., *Wear*, 1962, 5, Elsevier Publishing Company, Amsterdam.

Pathogenesis of Atherosclerosis

SIR,—Apprehensive lest I be smitten to my knees by the Heraklean club inscribed with the words, "Ignorance of the Greek Language," so doughtily wielded by Sir George Pickering, though I be, I venture to challenge his derivation of atherosclerosis (29 February, p. 517).

He, by definition, obviously derives the word from *ἀθήρη*, porridge. In doing so I feel Sir George Pickering underestimates the merits of the clinicians who invented such words. They were men of parts, well-grounded in the classic tongues for the most part, and even if so doltish a conception as porridge-hardness had been acceptable to them at least they could and did distinguish between a long and short vowel, which their illiterate descendants it seems can't and don't (e.g., how often does one hear mispronounced such words as ego and amenity, even by those with some pretension to scholarship?) That is to say the English equivalent would have been given the sound of atharsclerosis or atheersclerosis, according to the form from which the derivation was taken. I proffer a far more suitable word as the logical progenitor, *ἀθήρη-ἑρος*, a spike or ear of corn. An ear of corn is without argument hard to the touch, and provides the necessary epsilon sound in the second syllable of atherosclerosis instead of the alpha or eta values put forward by Sir George. Philologically, *ἀθήρη* is a more honest parent than the name for a pultaceous mess.

My second point arises from his mention of intermittent claudication, and may expose me to the eyes of so distinguished a scientist and clinician as the Regius Professor as a

mere moron. I give a bare outline of the case which is in my mind.

Some 30 years ago a Fellow, a man of about 40 years of age, hurrying to his college, being late for hall, was suddenly struck motionless by acute pains in a calf. After resting for a few moments he was able to proceed, only to be halted twice or thrice more before reaching high table. On two or three subsequent Sundays, again being late and hastening, he experienced the same crippling agony. He then consulted an eminent physician who diagnosed intermittent claudication. My friend did no more about it than to leave home earlier so as to avoid having to hurry his pace. Since then he has had no calf pains except an occasional sharp ache which he labels "cramp."

After reading Sir George's lecture I have posed three questions to myself: (1) did my friend escape unscathed from a dangerous episode; (2) is he still at risk (to quote Sir George's dramatic words) of "abruptly changing from a symptomless man apparently healthy to a dead man, or a man incapacitated, etc.," or (3) is the original diagnosis to be dismissed as fallacious?—I am, etc.,

R. E. M. COKE HARVEY.

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Antidepressant Drugs and Liver Damage

SIR,—May I support wholeheartedly the excellent letter by Dr. William Sargent (14 March, p. 694) concerning antidepressant drugs and liver damage? There is I think little doubt that Dr. Sargent can be considered our most authoritative expert on the clinical use of drugs in psychiatric practice. His views must therefore be listened to with the greatest respect and consideration. I have used chlorpromazine extensively, and on occasions in dosages of up to 700 or 1,000 mg. a day for long periods in suitable cases, since this drug was introduced in 1954. I have only had two cases of jaundice, both of which were mild—one cleared up in spite of continued use of the drug, and the other cleared up when the patient was changed on to promazine. However, I suppose both these cases could have been unrecognized cases of infective hepatitis. In my own clinical experience I would consider chlorpromazine to be an extraordinarily safe drug.

For the last four years I have used phenelzine in combination with "librium" (chlor-diazepoxide hydrochloride) as my basic treatment for reactive depression. Similarly I have used imipramine as my basic treatment in cases of mild to moderate endogenous-type depression. Although I do not use "parnate" (tranylcypromine) myself I have seen a number of patients on this drug and on occasions have allowed them to continue and have, as yet, had no serious side-effects. This present controversy does indeed resemble that which appeared to take place over barbiturates when they were introduced.

General physicians who by the very nature of their work are unfamiliar with the treatment of psychiatric illness cannot be expected to assess the clinical safety or efficacy of these drugs. The giving of any drug carries risks. As we well know aspirin is probably a far more dangerous drug than any of those about which there seems now to be such needless panic. The treatment of illness is always a matter of probabilities—it is always a matter of assessing risks. I entirely support the views of Dr. Sargent that the risk attached

to the use of these drugs is extremely small, and it is more than unfortunate that the distrust of these drugs and panic concerning their use is being ill-advisedly engendered.

It is also interesting to note that in the same issue Dr. A. M. Barlow's letter (p. 694) concerning the post-mortem he performed on a woman who had allegedly died from a combination of phenelzine and imipramine. As he rightly says there was no proof.

Modern psychiatric drugs have brought relief and help to thousands of patients and have contributed to the revolution that has taken place in the running of our mental hospitals. Without the use of these antidepressant drugs many patients would have more than likely continued in their depressive state, possibly to the point of suicide and certainly to the point of requiring E.C.T. or admission to hospital. Although all psychiatrists recognize that E.C.T. is an extremely safe procedure and in itself revolutionized psychiatric treatment, nevertheless it does cause discomfort as well as affecting the memory quite significantly, sometimes for several months, even when the treatments are carefully spaced and only the minimum number required are given. The introduction of antidepressant drugs has allowed us to reduce the amount of E.C.T. that is given. However safe E.C.T. may be it is clearly much more satisfactory to treat an illness by drugs than by what is really a minor operative procedure. In our out-patient department attendances (average monthly figures) have risen steadily since January 1959 from 270 to 380. Out-patients E.C.T. treatments from a peak figure of 186 in April 1959 have dropped to 64 in January 1963, and now have reached a steady level of around 70 treatments per month. There is little doubt that this reduction has come about due to the introduction of the antidepressant drugs.

However, the most serious aspect of this matter is that a committee of general physicians have pronounced on drugs that do not come within their sphere of clinical practice, and I would hope that no psychiatrist is deterred from using these clinically useful drugs in appropriate cases. Finally, I would hope that Dr. Sargent will be invited as a member of this committee along with a leading expert in psychopharmacology.—I am, etc.,

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Humberstone, Leicester.

H. B. KIDD.

Antenatal Care

SIR,—There is one simple test which Mr. C. J. Dewhurst does not mention in his article (7 March, p. 611)—an investigation which may relieve parents of much anxiety and at the same time provide a possible gain to the country's transfusion service. It is the rhesus typing of the husband of any rhesus-negative woman, which I think should always be done.—I am, etc.,

Clacton-on-Sea,
Essex.

C. A. HAXTON.

SIR,—I read with interest the article by Mr. C. J. Dewhurst on antenatal care (7 March, p. 611), but was dismayed to find in it no mention of the midwife. He mentions that hospital bookings for 24 to 48 hours may provide the safest means of deal-