

bleed severely after only a few tablets and bleeding may persist for days or even weeks. Others with "cast-iron stomachs" seem to be able to tolerate 16 or more aspirin tablets every day for years without anaemia or blood loss being observed.

Our studies of blood loss in response to various preparations of salicylates, corticosteroids, and other anti-rheumatic drugs have been submitted for publication elsewhere. Meanwhile we feel that, despite its signal value in the management of the joint pains and stiffness of rheumatoid arthritis, aspirin has serious and unpredictable disadvantages in a minority of patients, and is responsible for more iatrogenic disease than can be regarded with complacency. The situation calls for renewed efforts on the part of drug firms to produce an effective preparation which is free from these undesirable effects.—We are, etc.,

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Aspirin and Anticoagulants

SIR,—We have recently had a patient with haemorrhage from the external ear and renal tract, after the oral administration of aspirin. He was a man aged 56 years having long-term treatment by anticoagulants, following upon previous cardiac infarction. The dosage of phenindione was 75 mg. daily, and bleeding from the sites mentioned occurred within 24 hours after two doses of a mixture containing aspirin gr. 10 (0.65 g.), phenacetin gr. 5 (0.32 g.), and codeine gr. $\frac{1}{4}$ (8 mg.) in suspension, per half fluid oz. (14 ml.) dose.

It is well recognized that aspirin may cause haematemesis from irritation of the gastric mucosa in susceptible persons; but the present case suggests that there is coming into being another added risk in a class of patient now very frequently met with in general practice. It is a known fact that salicylates can cause lowering of blood prothrombin, and, if the normal level is already depressed by the administration of anticoagulants, which retards prothrombin synthesis, then it is likely that aspirin will enhance the action of these drugs while being taken on an otherwise safe dosage controlled at hospital by prothrombin estimations monthly. Our experience suggests that salicylates and their compounds are contraindicated in patients on anticoagulant therapy, and such patients should be warned not to take aspirin or its many proprietary analogues, except perhaps under careful medical supervision. Such patients should preferably be treated with some form of paracetamol, which, so far as is known, does not exert any adverse effect upon prothrombin levels.—We are, etc.,

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Gastro-duodenal Haemorrhage

SIR,—In his article on gastro-duodenal haemorrhage, Mr. J. M. Large (March 26, p. 932) emphasizes the very important points that acute gastric ulcers do not require surgical treatment in the absence of bleeding, and that the prime aim of surgery is to arrest haemorrhage in

those cases that are bleeding. Although I have no accurate statistics, I would make a confident guess that, both in Britain and North America, partial gastrectomy is the commonest operation performed for continuous massive haemorrhage from acute gastric ulceration. As Mr. Large implies, this operation is performed for want of a more effective and less mutilating form of treatment, and, as he says, it does not prevent subsequent acute ulceration. However, the operation that he suggests of simple excision of the acute ulcer is much less likely to prevent subsequent ulceration than is partial gastrectomy. Also, it is not uncommon for acute ulcers to be multiple. For these reasons, simple excision does not find general favour and Mr. Large is indeed fortunate that none of his 23 patients had further bleeding.

The realization that the present methods of treatment are unsatisfactory in acute ulceration has aroused interest in treatment by local gastric hypothermia as advocated by Wangensteen.¹ Continuous cold perfusion of the stomach, either with or without an intragastric balloon, has been shown experimentally to reduce gastric acidity and pepsin secretion,² to reduce motility,³ and decrease stomach blood-flow.⁴ Its use in the treatment of gastroduodenal and possibly, also, oesophageal haemorrhage has, therefore, a sound physiological basis and has proved effective in clinical trials.¹ Local hypothermia is not suggested primarily as an alternative to surgery, but as a useful addition to the therapeutic armamentarium, particularly in those cases where chronic ulceration is not proved or not suspected on the history. It is effective in stopping massive haemorrhage in both chronic or acute ulceration, in order to allow an accurate diagnosis to be made. In acute ulceration, the need for surgery is usually averted. I have had the privilege of working with a team using local gastric hypothermia and am impressed by its possibilities.—I am, etc.,

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Strontium-90 in Human Bone

SIR,—Your leading article on strontium-90 in human bone (April 9, p. 1117) is phrased in reassuring terms. I wish to draw attention to some less reassuring aspects of the problem.

The gallant little band of Government scientists who are investigating the public-health aspects of fall-out do their best with the meagre resources available, but only about 100 samples of human bone are examined each year from a total population at risk of over 51 million. On this minute fraction an attempt has to be made to estimate the radio-strontium levels in the general population. One would be happier, in these circumstances, if the sampling had been conducted according to some plan, but a glance at the 1959 report¹ shows that any efforts which may have been made in this direction have been unsuccessful. Perhaps special attention has been given to high-risk areas, since there are 43 samples from Wales in the total of 102, but all but 4 of the 43 samples come from the South Wales industrial belt and not from the more mountainous rural areas where the higher levels are to be expected. In these circumstances I think you should have drawn attention not only to the