been made available to practitioners and widely advertised in the medical press, and it seems very unfortunate that this should have been done without detailed clinical trials to confirm the claims made for this preparation.

Summary

Treatment of trichomonal infections by local applications has proved unsatisfactory and the nature of the disease is probably such that treatment will continue to be unsatisfactory until a remedy is found which is effective when administered systemically.

An antibiotic, trichomycin, which has not been marketed in Britain and which has pronounced trichomonocidal activity *in vitro*, was supplied for investigation. Groups of patients were treated locally, systemically, and with combined local and systemic treatment. Local treatment was not satisfactory in preventing relapse and was less effective than the standard remedy, acetarsol. Systemic treatment was ineffective in eradicating the infection in 44 cases, and tests for antitrichomonal activity were negative in blood serum from six of these patients and in urine from 12.

Acinitrazole, which is also an effective trichomonocidal drug *in vitro*, was without therapeutic activity in 35 cases treated systemically. Samples of blood serum from four patients and urine from 10 patients showed no antitrichomonal activity at the end of the course of treatment.

A plea is made that new drugs should not be put on the market and advertised to physicians until adequate trials have been carried out and the results confirmed on repetition.

We thank Mr. A. J. King for permission to publish these results and Miss Joan Whittington and Dr. J. E. Middleton for the laboratory investigations. We also thank Dr. G. R. Fryers, of Messrs. Wyeth and Bro. Ltd., for arranging for the supplies of trichomycin and Messrs. Ward, Blenkinsop and Co. Ltd. for supplying acinitrazole. Part of this work was done on a grant from the United States Public Health Department on behalf of the working party on non-specific urethritis of the Medical Research Council.

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Medical Memorandum

Stab Wound of Heart with External Bleeding and Tamponade; Suture; Recovery

Reports of successful surgical treatment of stab wounds of the heart are extremely rare in British literature, only four having been published in recent years. The following case presented certain features differing from those previously recorded.

CASE REPORT

A married woman aged 25 was admitted to hospital on August 23, 1953, having sustained a stab wound of the praecordium with a pocket-knife half an hour previously. She was extremely shocked, having bled copiously externally,

though the wound itself was small. She seemed too ill for radiological examination, but physical examination revealed no evidence of intrapleural bleeding or pneumothorax. There was a suggestion of jugular distension, but external bleeding seemed sufficient to account for the degree of shock. She was given 2 pints (1,140 ml.) of dextran followed by 2 pints (1,140 ml.) of blood in three hours. Her pulse became perceptible and was paradoxical: blood pressure was 75 mm. systolic, no diastolic reading being obtainable. Jugular distension was now definite, and there was slight peripheral cyanosis. Haemopericardium with tamponade was diagnosed; operation was decided upon and was begun four hours after admission.

Operation.—The incision was L-shaped, centred on the stab wound, which was excised. The fourth left costal cartilage, which was found to have been severed, was resected, and the pleura was entered; it contained no blood, but the pericardium was bulging, blue, and tense. On opening the pericardium much clot and fluid blood was evacuated; a ½-in. (2-cm.) linear wound on the pulmonary conus of the right ventricle was spouting blood during each systole. The heart was "palmed" in the left hand, the thumb and index compressing and controlling the wound on the anterior aspect (Sauerbruch and O'Shaughnessy, 1937). Three silk sutures tied without tension effected satisfactory closure. The pericardium was loosely approximated with interrupted catgut, and the chest wall was closed in layers, with closed drainage of the pleura for 24 hours. Immediately after closure of the heart wound the blood pressure rose to 110/70, and remained at this level without further transfusion.

The post-operative course was relatively uneventful; a slight pericardial effusion developed on the fifth day, and disappeared after a week's bed rest and systemic chloramphenicol. Six months later the patient was symptom-free and her electrocardiogram was within normal limits.

COMMENT

Contrary to popular belief, stab wounds of the heart are by no means always fatal. Although rare in Britain, this type of injury seems relatively common in America and Europe: several large series of cases treated surgically have been reported in American literature, with a survival rate of over 50%. Patients reaching hospital alive must of necessity have small wounds; research (Brockman *et al.*, 1953) has shown that large wounds are almost immediately fatal.

Blalock and Ravitch (1943) recommend transfusions at first, to raise the venous pressure and counteract tamponade. Aspiration of the pericardium is usually ineffective because of clot. Most authors recommend surgical intervention. The approach used in the above case was adequate, speedy to make, and simple to close. Wilson (1951) stresses the friability of ventricular muscle, not noted in the above case, and advises that the pericardium be left partly open to prevent recurrence of tamponade.

Most recorded cases have presented features of either tamponade or exsanguination; the first occurs if there is no free exit of blood from the pericardium, the second if such exit is present. The case reported here presented as one of exsanguination from external bleeding, and it was not until 5 pints (2,840 ml.) of intravenous fluid had been given that signs of tamponade became apparent.

I thank Mr. C. M. Pearce, under whose care the patient was admitted, for permission to publish this case; Dr. E. A. Milner, whose skill as an anaesthetist made the operation possible; and the theatre and ward staff for their co-operation and unremitting care.

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