Technical method

A venepuncturing chair suitable for an outpatient department or laboratory blood collecting room

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The ease and safety with which blood may be withdrawn by venepuncture from ambulant patients depends to a great extent on the design of the chair in which the patient is seated while blood is being taken. Such a chair should meet the following specifications: (1) it should be comfortable for the patient and provide support for either arm as required, and in addition should be so designed as to make it virtually impossible for him to fall should he faint. (2) It should allow quick first aid to the fainting patient. (3) The blood collector should be able to use it for long periods without back strain.

About 20 years ago the first attempt to design such a chair was made in this laboratory. Through the years there have been various modifications to

what were originally locally produced articles in wood, and, resulting from this, the chair shown in figure 1 was specially made to our design.¹ Two of these chairs have now been in use for almost three years and have proved most satisfactory.

The arms of the chair are wide and padded and at a height which reduces bending of the patient's arm. This together with the sloping chair back, make it highly improbable that a patient who faints could fall out of the chair. Furthermore, in the case of the fainting patient the chair has been designed so that one person can quickly convert it into a couch. This procedure requires one hand only, the other is available to support the patient. Only two operations are necessary to drop the back of the chair within 20° of the horizontal and to raise the padded leg rest, as can be seen in figure 2.

The chair is light and even when occupied it can easily be moved; a brake attachment to the front wheels eliminates movement during venepuncturing and also when patients are in the act of sitting down or getting up. Patients with arthritis and other similar disabilities appear to experience little difficul-

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¹A. C. Daniels & Co Ltd, Caerphilly, Glamorgan

Fig 1

Fig 2

ty in using the chair. The patient's arm is at a height which allows the operator the maximum comfort at what can become, under adverse conditions, a back-breaking task.

We are grateful to Dr E. G. Rees, consultant pathologist, for his helpful comments, and to Mr J. D. Hamlett, chief technician, Morbid Anatomy Department, for the photographs

Letter to the Editor

Survey of Hepatitis in Laboratories

Members of the ACP who helped with this survey by submitting data on proformas may be interested in a preliminary summary of the findings for the three years of the survey (1970-72). Brief reports concerning the first two years of the survey were made to the Pathology Section of the Royal Society of Medicine and to the 90th General Meeting of the ACP (Grist, 1973 a and b).

Hepatitis cases were reported by 12 (5%) of 244 laboratories in 1970, 15 (7%) of 215 in 1971, and eight (2%) of 337 in 1972. Of the laboratories reporting cases, in each of the three years more than average tested specimens from haemodialysis, transplant, and haemophilia units (see table), and to a lesser extent tested for hepatitis B antigen (HBAg). Different organizational arrangements for HBAg testing did not appear to be associated with differences in hepatitis risk.

The attack rate per 100 000 in staff of all grades was 116 (13/11 253) in 1970, 174 (18/10 380) in 1971, and 60 (9/15 103) in 1972, ie, 109 per 100 000 per annum for the three years combined. Considered by grade and discipline, the highest attack rates in 1970 were in science micro-

biologists (1/126 = 0.79%) and biochemical technicians (7/1438 = 0.49%); in 1971 the highest rates were in science biochemists (3/315 = 0.95%), medical haematologists (2/315 = 0.63%), and medical morbid anatomists (2/390 = 0.51%); the highest rates in 1972 were in science biochemists (1/469 = 0.21%) and haematology technicians (4/2775 = 0.14%). The highest attack rates per 100 000 per annum for the three years combined were 316 (1/317) for science microbiologists, 266 (3/1120) for science biochemists, 210 (3/1429) for medical anatomists, and 183 (9/4900) for biochemical technicians.

Tests for HBAg had been carried out in 47 cases. Of the 16 positive reactors, five were admitted to hospital as were three of the 31 negatives. No deaths were reported. More than half the patients were under 30 years old, both sexes were involved, and cases were scattered through the country over the three-year period without significant clusters.

Although no remarkable or alarming trends emerged from the survey, some of the differences in hepatitis attack rate between different areas of work underline the modest but significant risk associated with laboratory work and the need to take sensible, but not exaggerated, precautions.

These findings will be reported more fully after further analysis.

I thank the ACP for assistance with the expenses of this survey and all those members whose cooperation made it possible. I am also grateful for the help given by my secretary, Miss E. H. Simpson, and by Mrs M. E. Martin, of Glasgow Northern Hospitals Medical Records Department.

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Feature	Percentages of Laboratories in Each Year with Indicated Features ¹					
	1970		1971		1972	
	T	H	T	H	T	H
Testing haemodialysis unit specimens	28	50	29	60	25	50
Testing transplant unit specimens	16	33	18	40	17	38
Testing haemophilia unit specimens	18	33	19	27	19	38
Testing drug addiction unit specimens	9	8	13	27	11	0
Performing HB Ag. tests	15	25	16	27	17	25

Table Work of laboratories in relation to hepatitis

¹T = total reporting laboratories
H = laboratories reporting hepatitis