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7(a)

STATED CASE

FOR

EXTENSION TO INVERNESS REGIONAL TRANSFUSION CENTRE

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February 1982

INTRODUCTION

The necessity for extra accommodation arises from a number of past, present and future factors, of which the main items are:-

(1) Recognised deficiencies in the accommodation provided when the present Regional Transfusion Centre (RTC) was commissioned in 1970.

(2) The implications of the Medicines Act and the Health & Safety Act.

(3) The steady increase in blood donation collection (approximately 10% per year since 1970) and the growth of blood component therapy.

(4) The commitment of the Inverness RTC to supply specialised plasma for specific immunoglobulins.

(5) The anticipated need for an increasing supply of Fresh Frozen Plasma (FFP) which is likely, in part, to require an increase in the plasmapheresis programme.

1. DEFICIENCIES RECOGNISED AT COMMISSIONING IN 1970

The new Centre, commissioned in 1970, was created as part of Phase I of the new Raigmore Hospital complex. The Transfusion Centre room data sheets originated in 1962 and appropriate consultation with the Director did not take place until 1965. At that time (1965) it was indicated to the Director that no significant changes in the plans could be made despite the fact that the following deficiencies were noted:-

1. Inadequate size of Main Office
2. Inadequate size of Donor Administrative Staff office accommodation (Organising Secretary plus Deputy share an office of approximately 180 square feet).
3. Inadequate size and location of donor waiting area
4. Inadequate storage facilities (the storage facilities provided were less than in the old Centre and the Royal Northern Infirmary).
5. Inefficient plasmapheresis facilities.

2. IMPLICATIONS OF MEDICINES/HEALTH & SAFETY ACTS

In the last six months, there have been visits to the laboratory block by the Health & Safety Inspectors.

The Medicines Inspector agreed that the present accommodation for the plasma separation area was wholly inadequate, and expressed broad agreement on what had been planned.

The key point therein involves the acquisition and use of the office room next to the present plasma separation room, and this in turn means that the acquisition of other office space for blood donor organisation becomes essential.

Concern was also shared with regard to the wholly inadequate storage facilities and the hepatitis testing facilities: the latter is currently accommodated in a room of 60 sq. ft.

3. INCREASE IN WORKLOAD RELATED TO FRESH PLASMA PROCUREMENT

A brief general outline of the services to the Highlands & Islands is given in Appendix I, including basic data on staffing, blood collection, special blood products and the Laboratory Divisions involved therein.

An analysis of recent years is contained in Appendix II. It should be noted that the donation input in 1960 was 4,000.

Up to date trends in blood component production are summarised in Table 1.

The following points should be emphasised:-

(a) Red Cell Concentrates

It can be seen from Table 1 that in the last financial year ending March 1980 8,420 units of Red Cell Concentrate were issued (60%) to the hospitals in the Highlands & Islands, compared with only 5,140 units of whole blood. This represents a dramatic and substantial change in clinical practice and associated laboratory work since commissioning in 1970.

(b) Fresh Frozen Plasma

The predominant use of Red Cell Concentrates for transfusion reflects the success in the last 5-7 years of the contribution of FFP, namely for Factor VIII production for haemophiliacs.

The Inverness Centre has developed, in the last decade, a highly organised scheme for centrifuging and freezing 60-80% of the fresh plasma from the routine blood donations at Donor Sessions within 3-18 hours. This provided some 1,818 litres of FFP as 'Recovered Plasma' in 1980-81.

TABLE 1/

TABLE I

	1975	1976	1977	1978	1979	1980
Donations	10,482	10,632	11,505	12,697	13,701	14,033
Whole Blood Issued	5,370	6,262	6,159	?	6,635	5,140
Red Cell Concentrate issued	6,945	7,545	6,484	7,132	7,417	8,420
Plasmapheresis Units	550	989	634	793	594	1,005
Platelet concentrates	38	249	147	232	253	155
Fresh Frozen Plasma (litres)	1,127	1,384	1,289	1,441	1,501	1,818
Outdated Plasma (litres)	370	252	324	362	318	358

What happened!?

Following a series of meetings within the SNBTS, and others between the SNBTS Directors and Transfusion Directors under the auspices of the SHHD, to discuss the future plasma requirements for the Scottish Health Service, broad agreement has emerged with regard to a substantial increase in the requirement for fresh plasma. This is primarily to cope with the increasing demands for Factor VIII Concentrate for haemophilia A patients and to respond to the Government's wish for national self-sufficiency in blood and blood products. It is likely that part or all of this increased demand will have to be met by an extension of the existing plasmapheresis programme. The present plasmapheresis accommodation is wholly inadequate.

4. SPECIFIC PLASMA FOR IMMUNOGLOBULINS

Inverness was the first RTC (1968) to obtain permission from the Secretary of State for Scotland to immunise Rh-negative male volunteers for the production of anti-D IgG. (Appendix I, page 5 for further details). The Centre has also made significant contributions to the production of anti-tetanus plasma. This work has demonstrated that the small size of the region is an advantage in terms of creating and maintaining immunised panels of donors. This requirement is likely to increase in the future, and the Inverness Centre is well placed to do this work.

The present donor facilities for plasmapheresis for specific immunoglobulin plasmas are only adequate for six donors at one time. This is cumbersome and inconvenient to both donors and staff and is not cost-effective. A further serious restriction limiting a routine plasmapheresis scheme for 100 donors/week is the limitation of centrifuge capacity within the Centre because of lack of accommodation. A separate centrifuge/plasma separation room is needed which is adjacent to the Donor Suite, thus making this function independent of routine blood component production and also enhancing the safety of the plasmapheresis procedures with respect to the donor.

5. PRESENT BLOOD DONOR FACILITIES

The present room for routine blood donations in the Centre can only cope with a maximum of seven donors at one time. With the increased clinical demand for blood alone since 1970, these facilities have grown inadequate for local major blood donor sessions. At present the local (Inverness) sessions for 100-200 donations have to be held in the town of Inverness in a local Church Hall some 2½ miles distant. The provision of a new plasmapheresis cum Blood Donor Suite of 12 bed size would then also allow 120-150 donors (on average) to be bled quickly and competently in a 3½ hour morning or afternoon session in the Centre.

This new combined suite would be an added provision in donor facilities for an increase in workload in the next 5-10 years.

SUMMARY/

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The accommodation deficiencies in the Inverness Centre can be summarised as follows:-

Item	Reason
General Office facilities	Faults in original design concept
Donor administrative offices	Faults in original design concept
Storage facilities	Faults in original design concept
General staff amenities	Faults in original design concept
Donor Suite	Emergence of changes in practice and increased workload
Plasma Separation Area	Emergence of changes in practice and increased workload
Hepatitis Testing Area	New function since commission

PROPOSAL

1. That the deficiencies in the present accommodation at the Inverness Centre are accepted and action begun to remedy the position.
2. That the plan enclosed (which has the support of the Director and NMD) is considered by colleagues in the Building Division of CSA.
3. That if the broad principles contained in (2) are acceptable, then the Agency opens discussions with the Highland Health Board with a view to the acquisition of an area of land in the courtyard between the RTC and the Occupational Therapy Unit.