

### APPENDIX III

#### Future Research

Observations made during the last four years at Lord Mayor Treloar College on boys suffering from haemophilia, strongly suggest that the frequency and duration of spontaneous bleeding are not solely a function of the presence of inadequate amounts of factor VIII in the blood. (See Appendix I, Paper A). These observations indicate that the following lines of investigation might usefully be pursued:

1. Measurement of platelet function and its relationship to factor VIII related protein (See Appendix I, Paper B) and the potentially deleterious effect upon this of administered drugs such as analgesics or sedatives given to relieve pain or distress.
2. A search for platelet antibodies which might arise spontaneously or as a result of repeated transfusions.
3. Investigations of other clotting factors associated with factor VIII (such as fibrinogen or factor V) hitherto assumed to be present in normal amounts in haemophiliacs, to determine their possible interaction or inadequacy.
4. A study of the natural means of clot dissolution (fibrinolysis) to measure the possible imbalance between the formation of blood clots and their subsequent removal in haemophilic subjects which might counteract the benefits of transfusion or increase the frequency of spontaneous bleeding. Clinical improvement in selected cases following treatment with anti-fibrinolytic drugs suggests that such an imbalance exists. (See Appendix I, Paper C).
5. A combined research project to determine whether there is a relationship between immune arthritis and the appearance of factor VIII antibody in Haemophilia. (See Appendix II).
6. The Serum Hepatitis project is to continue at the request of the Public Health Laboratory Service. A preliminary report has already been compiled and forwarded. A further report containing the findings over a three year period is now complete and will be forwarded as soon as possible. The final results for the four year period will it is hoped, be published.
7. At a meeting attended by the Directors of the various Haemophilia treatment Centres in the country held at Oxford on 27th October, 1972, it was unanimously agreed that a Clinical Trial to evaluate prophylactic therapy in the treatment of Haemophilia should be carried out. It was decided that it should take the form of a double-blind cross over trial and a protocol for such a trial was drawn up by Dr. Rosemary Biggs and discussed. It became obvious after discussion that such a trial could only be pursued at an establishment like Lord Mayor Treloar College where boys are under close daily observation for prolonged periods and where meticulous day to day records on each boy are maintained. Primarily this is due to the organisation already set up by the Research Fellow and his secretary, the cost

(Continued.....)

Appendix III

/7

of which is covered by the grant from the National Fund for Research into Crippling Diseases. Now that this organisation is established, the Lord Mayor Treloar College is an ideal centre for this type of research and in this respect it is unique in this country. It would therefore be a pity if such an organisation was allowed to lapse for lack of financial support.

The Ministry of Health agreed to cover the cost of the materials employed in this trial and it has the formal approval of the Medical Research Council. Much time and trouble has been spent by the Director of Lord Mayor Treloar Haemophilia Centre and his Deputy in the detailed planning of this trial. Boys to be included in this trial had to satisfy certain strict criteria and were selected accordingly by the Research Fellow. The trial commenced during the Summer Term of 1973 and it is not likely to be completed before the end of the Spring Term, 1975.

This trial is one of the most important research studies now being carried out in this country on the treatment of haemophilia and its implications could be profound.