

POLYELECTROLYTE PLASMA FRACTIONATION - TEN YEARS ON

By 1990 the Cohn and cryoprecipitate fractionation techniques will have been replaced by the polyelectrolyte ion-exchange process.

The effect on the plasma donation programme, the plasma fractionation industry and clinical application will be dramatic.

Extra high yields of the coagulation factors will enable the donor programme to keep pace with the increasing demand with only a minimal increase in plasma collection. The imbalance between the requirements for Factor VIII and the other plasma proteins will vanish. Donor centres will be responsible for the first stage of fractionation adsorbing the labile fractions directly onto the polyelectrolytes.

Elution and further processing will be completed by a local fractionation unit, which, due to the simple, low cost nature of the polyelectrolyte process, will be viable for a much smaller plasma throughput. This spread of technology coupled with the increased yields will allow most countries to conform with the WHO ideal of 'self-sufficiency' in plasma products. Paid donor collection will decrease rapidly in the United States when export demand declines.

There will be no risk of hepatitis infection from polyelectrolyte fractionated materials, prophylactic treatments will increase and new fractions will provide a wider range of therapeutic treatments probably via the intramuscular route.

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