



Universiteit
Leiden
The Netherlands

Hemolytic disease of the fetus and newborn

Zwiers, C.

Citation

Zwiers, C. (2019, March 12). *Hemolytic disease of the fetus and newborn*. Retrieved from <https://hdl.handle.net/1887/68703>

Version: Not Applicable (or Unknown)

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/68703>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The following handle holds various files of this Leiden University dissertation:

<http://hdl.handle.net/1887/68703>

Author: Zwiers, C.

Title: Hemolytic disease of the fetus and newborn

Issue Date: 2019-03-12

EPILOGUE

Again, I want to take you back to the 1960s with the quote of professor Jack Bennebroek Gravenhorst, the pioneer of intrauterine transfusions in the Netherlands:

*'Hoofdzaak is het bestrijden van de anemie. Bij het voortschrijden van de technische mogelijkheden en door uitgebreidere toepassing van de laatstgenoemde methode zal ongetwijfeld een elegantere methode gevonden worden voor de toediening van het bloed, waardoor bezwaren, die thans ongetwijfeld bestaan, uit de weg geruimd zullen worden.'*³⁵

In English, this quote would be: *'The main issue is to counter the anemia. The broadening of technical possibilities and more extensive application of the abovementioned method will undoubtedly lead to a more distinguished method for the administration of blood. Hereby the objections, that at present surely exist, will be eliminated.'*³⁵

More than 50 years later, times have changed drastically for patients with HDFN. The primary goal (*'hoofdzaak'*) is evolving. It is no longer solely to treat fetal anemia (*'bestrijden van anemie'*), but also preventing it. Preventing red cell alloimmunization with RhIg and matched blood transfusions, preventing the resultant fetal anemia with immunomodulatory agents and preventing hydrops with early antibody screening. Evaluation and adjustment of intrauterine transfusion techniques (*'voortschrijden van de technische mogelijkheden'*) and extensive team experience (*'uitgebreidere toepassing'*) have led to a tremendous reduction in procedure risks. Professor Bennebroek Gravenhorst was certainly right, most of the hesitations about IUT that were still abundant in the early years, have disappeared. HDFN has become a rare disease, with a reliable standard therapy. The future is exciting: the development of new immunomodulatory therapies might eventually even lead to the complete eradication of invasive intrauterine treatment.