



ISTH this year was themed **Research, Discovery, Outcomes**, and there were a number of presentations outlining the proposed studies for gene therapy, and the real-world experience of the use of emicuzimab, including in surgery, and the local and global experience of extended half-life factor products. Other presentations included studies about quality of life and the burden of living with bleeding disorders, and comparative studies between people living with severe and moderate haemophilia.

MUSCULOSKELETAL ULTRASOUND

*Andrew Atkins
Nurse Consultant, SA Adult
Haemophilia Treatment Centre, Royal
Adelaide Hospital*

MSKUS – professional approach to new therapies

Mary Lesh, United States

Nurse forum sessions were held on two afternoons.

In one of the nurse forum sessions a nurse practitioner from San Francisco outlined a 5-year retrospective study on the use of musculoskeletal ultrasound in a haemophilia treatment centre (HTC) to affect clinical decision-making in acute bleeding events. The study included 26 children/adolescents with a mild/moderate (8) or a severe (17) bleeding disorder, and 1 platelet disorder. 16 were on a prophylaxis treatment regimen. There was a total of 97 ultrasounds performed for suspected bleeding events. Severe haemophilia represented 50% of the total patients and 42% of the total scans. By comparison, moderate haemophilia totalled 8% and 13%, and mild haemophilia 19% and 23% respectively.

The study assessed the use of ultrasound at follow up reviews in the HTC for ongoing pain/unsatisfactory progress.

15 patients had a total of 38 ultrasounds repeated, mostly within 2 weeks. 12 were for soft tissue bleeds, and 26 were for joint bleeds, with the ankle joint being the most common joint to be re-scanned. Interestingly over 40% of the repeated scans were in patients with mild bleeding disorders. Just over half of the repeated studies resulted in either not commencing treatment, stopping treatment, or reducing treatment. Nearly half of these were prescribed alternative therapy to factor replacement, such as anti-inflammatory medication.

This study highlights a potential benefit in having readily accessible ultrasound in the HTC to assist in monitoring the effect of treatment for bleeding events.



REACHING OUT: TREATMENT OF MATERNAL BLEEDING DISORDERS IN MOZAMBIQUE

Natalie Gamble-Williams, Clinical Nurse Manager, and Stacey Hutchison, Haematology Clinical Nurse, Perth Children's Hospital, WA

Maternal death and post-partum hemorrhage in Sub-Saharan Africa - A pilot study in metropolitan Mozambique

Annette Von Drygalski, United States

Dr Annette Von Drygalski from the University of California in San Diego presented a retrospective study of maternal death and post-partum haemorrhage (heavy bleeding after childbirth) in metropolitan Mozambique. Maternal mortality in Sub-Saharan Africa is 500-1000/100,000 births (compared to 5-20/100,000 in developed countries), and post-partum haemorrhage is a leading cause, accountable for 30-50% of deaths. Dr Annette Von Drygalski shared her personal experience of visiting Mozambique where she worked collaboratively with the local hospital staff to identify the risk factors of post-partum haemorrhage and implement small but key first world interventional strategies to reduce the devastatingly high mortality rate.

The data was gathered from January – July 2018 at Maputo Central Hospital, Mozambique. Results showed that 80% of women who developed post-partum haemorrhage were found to be severely anaemic and that HIV positive mothers who developed post-partum haemorrhage were at the highest risk of mortality. Furthermore, it was identified that age, increase in body temperature, high parity (the number of pregnancies reaching a viable gestational age), and short gestation (the time that a baby develops inside its mother's body until it is born) were additional risk factors in those who suffered post-partum haemorrhage. Therefore, implementation of a simple model using 'easy to obtain' parity parameters on admission, including temperature and gestation length can assist predict the risk of post-partum haemorrhage. Early detection of post-partum haemorrhage risk factors and treatment guidelines will help improve survival rates!

Observations from the study identified:

- A lack of education in the community and amongst health professionals about post-partum haemorrhage and sustainable preventive measures in metropolitan Mozambique

- Limited resources for reliable data collection
- Protocols for treatment of peri-partum (around the time of childbirth) blood loss volumes were not used consistently
- Pre-existing anaemia is a complicating factor associated with post-partum haemorrhage.

Interestingly, sub-Saharan Africa has very low blood donation rates and has no access to nucleic acid testing (NAT) to look for HIV in the blood. Access to cryoprecipitate and tranexamic acid is not readily available especially when required in an emergency situation.

Outreach programs giving minimal resources and advanced knowledge can have incredible impact. Twinning programs with developing countries are invaluable in identifying gaps in service and providing sustainable solutions to improving health care. Implementation of simple and cost-effective strategies for early detection and treatment of post-partum haemorrhage will help address the resulting high mortality rates in Sub-Saharan Africa. Education is paramount in raising awareness of the risks and complications associated with post-partum haemorrhage and this knowledge empowers patients and health professionals to advocate and initiate treatment plans. ■