

## Dhaka Bangladesh 01.12.2017 – 08.12.2017

This was the third visit for Andy Williams, plastic and burns surgeon and Barbara Jemec, plastic and hand surgeon and the first for Zoe Clift, Hand Therapist.

Each day commenced with a handover and case presentation from the department, including their monthly audit, which highlighted a 10% mortality rate from burns and an overwhelming burden of work, followed by a presentation by the BFIRST team before we split up for ward rounds, theatres and hands-on training. At this visit the in-patient count was 497, still in the 100 bedded National Institute of Burn and Plastic Surgery (NIBP) building.

BFIRST donated a dermatome last year for harvesting skin grafts; this instrument is used only for special cases as they are running out of blades. Skin harvesting is therefore usually done by hand using a Watson or Humby knife, which the local surgeons are very skilled at. Limited availability of blood products and theatre time means that harvesting and grafting is usually done in stages, with a maximum of 20% body surface area at a time.

### Educational programme

The BFIRST contributed both with lectures and with one-to-one training in theatres and on the wards. Lecture topics included infection control and advances in burns care among others. This was the first inclusion of a therapist on the BFIRST Bangladesh team, a reasonable amount of time was spent on location fact finding, relationship building, and scenario analysis.

There is a significant workload of 497 in-patients, mostly having suffered burns. The physiotherapy department is severely under-resourced. Splint material is a challenge with some access to in-country prefabricated splints (generally not suitable positions for burnt hands or other hand surgery), plastic guttering material (toxic when heated) and Plaster of Paris. POP appears scarce with the therapists donating their own money to buy it occasionally. There is no other rehabilitation equipment to promote exercise or function with no obvious access to walking aides and minimal space for any bedside rehab or mobility practice. MDT teaching sessions were provided on “The Role of Early Splinting” and “Early Rehabilitation Following Tendon Transfer”. In addition, sessions were provided to the therapists on assessment, documentation, how to plan a treatment session and a practical session on fabrication of POSI splints in POP. The remaining time was spent assessing and treating as many of the current inpatients as possible with focus on post-burn positioning to minimize contracture, the use of exercise and encouragement to start this early, splinting on the wards and planning of future treatment sessions.

### ONGOING CHALLENGES:

- 1) The volume of patients, many of them burns, requiring high levels of therapy intervention with a small team; some of whom are not the most motivated.
- 2) A relatively low level of ability to assess a patient and subsequently plan an appropriate treatment with a knock-on inability to prioritise patients.

3) A severe lack of rehabilitation equipment and space for a caseload of patients that includes high numbers of patients who have been bedbound for long periods of time and high levels of paediatrics.

4) Lack of or poor provision of positional splinting post burn injury with limited early therapy intervention means significant contractures, returns to theatre and ultimately poor functional outcome.