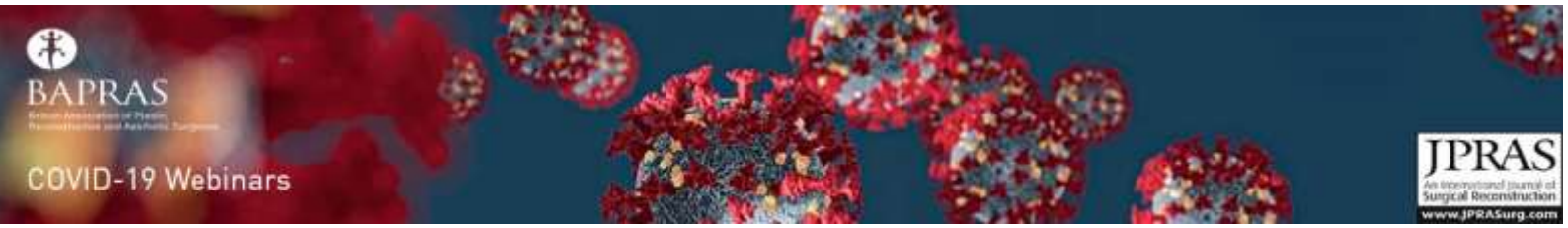


Burns Surgery
18 June 2020

Faculty

- Mr D Boyce, Chair, BAPRAS Education Committee; Consultant Plastic Surgeon, Swansea
- Mr J Leon-Villapalos, Chair, BAPRAS Burns SIG; Consultant Plastic Surgeon, London
- Miss I Jones, Consultant Plastic Surgeon, London
- Mr N Khwaja, Consultant Burns and Plastic Surgeon, Manchester
- Mr N Moiemen, Consultant Plastic Surgeon, Birmingham, President, ISBI
- Professor M Shah, Consultant Plastic Surgeon, Manchester
- Miss S Falder, Consultant Plastic Surgeon, Liverpool
- Mr P Drew, Consultant Plastic Surgeon, Swansea
- Mr S Watson, Consultant Plastic Surgeon, Glasgow, Lead CoBiS
- Mr D Barnes, Consultant Plastic Surgeon, Chelmsford
- Professor P Dziewulski, Consultant Plastic Surgeon,
- Dr S Wolf, Chief of Staff, Galveston Shriners, USA
- Dr J R Martinez, Consultant Plastic Surgeon, Madrid, Spain
- Dr P R Ferreyra, Consultant Plastic Surgeon, Mexico
- Dr M Fisher, Consultant Plastic Surgeon, Iowa, USA
- Dr R Ogawa, Consultant Plastic Surgeon, Tokyo, Japan (video presentation)

Resources

- Clinical guide for management of acute burns patients during the coronavirus pandemic
- American Burn Association's disaster response plan

Key Points

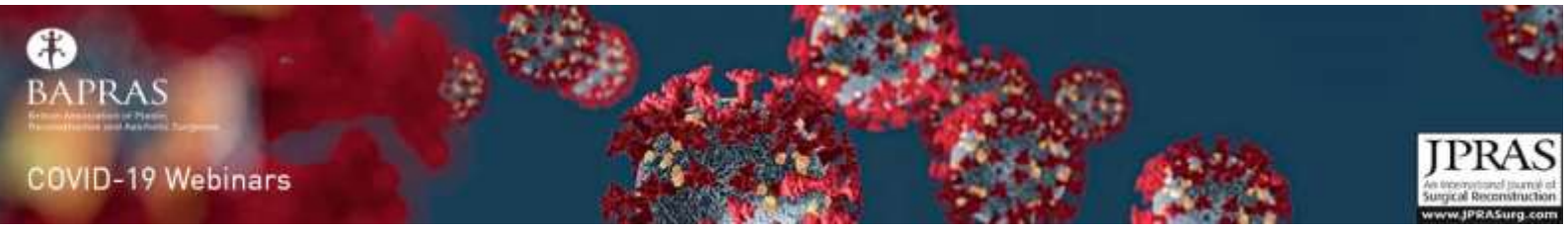
- Plans were put in place to deal with 'normal' levels of burns patients during COVID, but actually patient numbers have been down on previous years
- In the main, patient pathways for burns were able to continue as normal, due to collaboration around the UK's burns centres
- Use of technology, such as telemedicine, Zoom etc have been implemented successfully in many hospitals and can continue to be used

Points from each speaker

Introduction (D Boyce) click to view video

Burns- national plan during COVID (J Leon Villapalos/I Jones) click to view video

- UK Burns Network has continued to function through COVID to coordinate responses to significant increase in burn care activity across the UK, in partnership with NHS England and NHS Wales
- The network produced, in collaboration with NHS England/Wales and government input, a clinical guide for management of acute burns patients during the pandemic, to ensure same standard of care was given as pre-COVID, in spite of threats in loss of ITU beds and redeployment of staff
- Beds were ring-fenced in Chelmsford, Birmingham and Liverpool so if local care could not be given patients could be transferred and specialist burns staff be made available



- Services were not overwhelmed and for now capacity has been returned locally
- Services are encouraged to use the technology put in place during the crisis period, eg virtual meetings, telemedicine etc

Burn activity in the UK over the COVID crisis (N Khwaja) click to view video

- Risks identified: increases in injuries in the home, with locked down population; delayed presentation of smaller burns
- Data presented from IBID indicated drop in activity in April of in and outpatients presenting to burns services.
- As lockdown took place, there was a drop particularly in paediatric admissions and the anticipated increase in 'stay at home' injuries did not take place
- Do we need to consider a nationally agreed plan in case of a second wave that doesn't see the same reduction in burns admissions?

Birmingham Experience- challenges and opportunities (N Moiemen) click to view video

- Two sites in Birmingham dealing with adult and paediatric burns admissions
- Birmingham around 2 weeks behind London with regards to COVID admissions
- Day after first case, all hospital staff asked not to travel outside Birmingham (2 weeks before official lockdown)
- Three days prior to lockdown, QE hospital designated regional hub for COVID 19; 3 theatres designated to trauma including burns
- 20-30% reduction in burns admissions for April and May; no change to patients' care pathways except for small burns.
- Routine testing was undertaken, but no patients were found to be COVID +ve on admittance
- As of late June, normal working roster was reimplemented

Managing the paediatric burns service (M Shah, S Falder) click to view video

- Manchester
    - Junior team redeployed and department run between registrars and consultants
    - Significant number of burns from oven injuries (children helping with baking?)
    - Patients were sent to Alder Hey where necessary
    - Looking at how changes to service impacted outcomes, though initially outcomes don't seem to have been affected
- Liverpool
    - Preparation similar to Birmingham- ramped up intensive care capacity early (increased to around 50 beds); HDU closed and patients moved; burns unit requisitioned and burns patients relocated to emergency decision unit
    - Accommodated patients from Manchester when burns department there was closed. Online tools such as Zoom used to ensure seamless transfer between the two services
    - Staffing- Increased number of specialist nurses on ward; care was predominantly consultant-led as junior medics had been redeployed
    - Happily, didn't find service was overwhelmed and capacity wasn't met

Lessons Learned, Swansea (P Drew) click to view video

- Burns workload has been relatively light during the crisis in Swansea
- Developed new pathways to deal with referrals, admissions and protocols for segregation
- As in other areas, tele-referral system was introduced and will continue to be used post-COVID- a happy benefit of the crisis!

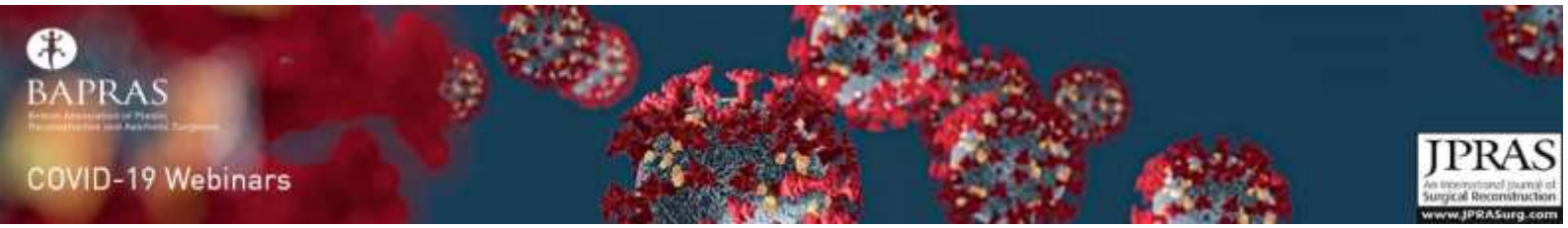
- Laborious operating in PPE- developed a local rule that wouldn't operate for more than three hours
- One of two locations in UK with separate burns ITU, so no COVID cases have been accommodated here.
- Learned to cope with reduced nursing cover and middle grade staff
- Group and individual support for staff has been arranged via local clinical psychologist

Burns reconstruction and COVID- patient care in Scotland (S Watson) click to view video
- In children's sector things have been relatively straightforward- use of telemedicine in Glasgow has been put into practice by nurses and therapists.
- A&E attendance for burns down 36%
- In adult sector, have had increase (8 patients compared to an expected 5) in major resus adult burns referrals
- Because of crisis, experienced reduced access for burns patients to some hospitals, so implemented a system where patients could be referred to other units, with consultants then travelling (sometimes great distances) to visit patients transferred to other units.
- Have found burns surgeons have had much larger than usual involvement in care of patients with major burns because of reduced access to ICU beds
- Registrars should be applauded for sacrificing a portion of their training to become ward doctors, as more junior staff were moved to deal with COVID management.

ITU experience in Chelmsford (D Barnes) click to view video
- Treated all patients as if they were COVID +ve
- Simulated admission process prior to any patients being admitted and changes to normal pathway was made accordingly
- Wearing PPE in hot burns theatres is not a pleasant experience but necessary
- Did treatment change between COVID +ve and suspected +ve but unconfirmed patients? No- patients in these situations were treated conservatively initially and then reoperated at a later date if necessary

Perspective from Galveston (S Wolf) click to view video
- Two hospitals- paediatric and adult
- Comparing 2019 to 2020 in paeds hospital- Acute patients reduced slightly, reconstructive work has dropped significantly. Practice did not change, except for testing for COVID and use of PPE
- View from US is we are mistreating patients by not undertaking reconstructive work- important to pay attention to risk, efforts to reconvene reconstructive work needs to be put into place
- National testing centre- have undertaken c42k tests, around 5% positive
- Some good will come out of the crisis: changes in protocols in testing, infection control, use of telemedicine, improvement in supply chains/use of resources

Spanish perspective (J R Martinez) click to view video
- 200,000 COVID +ve patients; lockdown started mid March, but patient numbers continued to rise through March/April
- In April: 2600 patient admitted, 91% with COVID, 17% in ICU, ratio of mortality in ICU was extremely high- 53%
- In March all burns patients were moved and the burns unit was closed, with beds being given to COVID patients. Plastic surgeons workload was moved to outpatients



- Over period where COVID patients were being treated, 11 burns patients were admitted
- Getting back to business as usual now (from early May) as the situation returns to normal

Mexican perspective (PJ Ferreyra) Click to view video

- First case- 27 February, First death- 18 March, Quarantine (social distancing)- from 23 March
- Today, almost 90,000 deaths
- Children's burns unit located in national hospital- only one in Mexico state. Was converted to mixed unit, for COVID +ve paeds patients with burns (trauma and emergencies only)
- Problems acknowledged between official testing figures versus reality
- Mistakes were made in Feb-June with delayed admission due to closure of burns unit
- Testing still not routinely available to all in Mexico

COVID 19 stress test-Burns systems as Bellwether (M Fisher) click to view video

- COVID gives opportunity to evaluate health systems' resilience with regards to national crises
- Should study differences in national responses and evaluate this to learn from experiences
- Further study needed to ascertain an optimal strategy and how to harness novel informal network responses