Fluid resuscitation prior in early management of burns patients

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New South Wales Severe Burn Injury Service "Burn Transfer Guidelines" recommends fluid resuscitation in adult patients with burn injuries >15% total body surface area (TBSA) with the use of Modified Parkland Formula (MPF) and Hartmann's solution. MPF is used as a guide and ongoing resuscitation is titrated to maintain a urine output of 0.5 to 1 ml/kg/hr. This study aims to review the rate of compliance with the above guidelines for of all adult patients transferred to Concord Hospital from 2009 to 2013.

334 patients identified of which 163 (48.8%) were recorded to have had Hartmann's solution was resuscitation and 13 (3.9%) had a different solution used, with the remaining 158 (47.3%) did not have the type of solution documented. MPF was used in 112 (33.5%) and not used in 38 (11.4%) of patients with the remaining 184 (55.1%) without clear documentation. Of the patients who had MPF used 44 (39.3%) had TBSA <15% making the use unnecessary. The majority of these patients had their burn size overestimated in the primary assessment leading to over resuscitation. From the patients who did not have MPF used 20 (52.6%) had TBSA \geq 15%, where it should have been used in this group. Some of these patients were under resuscitated and arrived post transfer with oliguria and in shock and other were overestimated and arrived with significant oedema.

This study found poor compliance with the transfer guideline with regards to fluid resuscitation. Increase education is required to improve the correct use of resuscitation fluids as per burns transfer guidelines to achieve the best outcome.

Key Words

Fluid resuscitation, burns

Nominated Stream for Oral Presentations

- [x] Medical
- [] Nursing
- [] Allied Health
- [] Scientific

Nominated Stream for Poster Presentations

[x] Care

- [] Prevention
- [] Research