

The effects of gender and adiposity on inflammatory cytokine response to burn injury

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Burn injury causes a significant disruption to physiological state; with the body mounting a systemic inflammatory response predominated by the up regulation of cytokine production and release. Female gender has been identified as an independent risk factor for burns mortality, however as of yet there is no consensus regarding the underlying mechanism. The hypothesis presented is firstly, that inflammatory cytokine response to burn injury differs between genders, and secondly, that a patient's degree of adiposity may influence their inflammatory state. A prospective cohort study of patients admitted to the Victorian Adult Burns Service has been carried out; assessing the relationship between inflammatory cytokine response, gender and adiposity. The aim of this study is to gain further insight into the inflammatory cytokine response mounted to burn injury and the factors which may modulate this response, with view to providing a more accurate prognostic picture for patients suffering from burn injuries.

Key Words

Burn injury

Inflammation

Inflammatory state

Cytokine Response

Gender

Adiposity

Outcome