

Vitamin D may be simple treatment to enhance burn healing

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Patients with severe burns who have higher levels of vitamin D recover more successfully than those with lower levels, according to a study presented at the Society for Endocrinology annual conference in

Harrogate. This study is the first to investigate the role of vitamin D in recovery from burn injury and suggests that vitamin D supplementation may be a simple and cost-effective treatment to enhance burn healing.

Despite improvements in burn care over the last 10 years, many [patients](#) are still at risk of poor recovery. Complications can range from delayed wound [healing](#) through to infections. Patients with severe burns are at high risk of infection that may lead to life-threatening sepsis. Vitamin D is known to have antibacterial actions that may help combat infection and therefore aid in wound healing of burn patients.

In order to investigate the role of [vitamin D](#) in recovery from burn injuries, Professor Janet Lord and Dr Khaled Al-Tarrah, at the Institute of Inflammation & Aging in Birmingham, assessed the recovery progress, over one year, in patients with [severe burns](#) and correlated this with their vitamin D levels. The study found that patients with [higher levels](#) of vitamin D had a better prognosis, with improved wound healing, fewer complications and less scarring. The data also showed that burns patients tend to have lower levels of vitamin D. These data suggest that vitamin D supplementation immediately following burn injury may have potent health benefits to the patient, including enhanced antimicrobial activity to prevent infection, and improved wound healing.

Prof Lord states, "Major burn injury severely reduces vitamin D levels and adding this vitamin back may be a simple, safe and cost-effective way to improve outcomes for [burns patients](#), with minimal cost to NHS."

The effectiveness of vitamin D supplementation to improve outcomes in burn patients would need to be verified in clinical trials. Prof Lord and her team are now focussed on finding out why there is a rapid loss of vitamin D in patients immediately following burn injury and hope that they may be able to prevent this in future. The amount of reduction in patients' vitamin D levels was not related to the severity of the burn, so

levels may also be decreased in more minor burn injuries.

Prof Lord comments, "Low vitamin D levels were associated with worse outcomes in burn patients including life threatening infections, mortality and delayed [wound healing](#). It was also associated with worse scarring but vitamin D levels are something generally overlooked by clinicians."

Provided by Society for Endocrinology

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