

## Shellfish dressings help save soldiers' lives in Afghanistan

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**A special bandage, partly made from crushed shellfish, is helping to save the lives of badly injured troops and civilians in the deserts of southern Afghanistan. Report by Jason Impey.**



*British troops use the new chitosan bandages on simulated wounds at Camp Bastion field hospital  
[Picture: Andrew Linnett]*

The bandages are put directly into combat wounds and become sticky on contact with blood – helping clots develop and rapidly stopping even severe bleeding - a vital medical capability as rapid blood loss is one of the major causes of combat fatalities.

Carried by many troops as well as medical staff, the easy-to-use bandages - whose active ingredient 'chitosan' is derived from crushed prawn shells - are simply removed by surgeons when their job is done.

Made by the medical firm HemCon they are one of a number of advanced pieces of medical equipment now being used to save lives at the British Field Hospital in Camp Bastion, Helmand Province – a hospital that is better equipped to deal with severe trauma casualties than many mainstream UK hospitals.

The latest enhanced equipment includes the first British CT (Computerised Tomography) scanner in Afghanistan, a range of advanced mobile digital X-ray machines and innovations such as new self-applied combat tourniquets and new rapid drug delivery systems that slash the time it takes to put in a 'drip'. Military medics have also been supplied with another lifesaving device - a special mineral that is poured into wounds to aid clotting.

Trauma specialist Colonel Tim Hodgetts, from the Royal Centre for Defence Medicine, currently based at Camp Bastion Field Hospital said:



*Carried by many troops as well as medical staff, the easy-to-use bandages are simply removed by surgeons when their job is done  
[Picture: Andrew Linnett]*

"We see a far greater flow of severe trauma patients here than in UK civilian hospitals and it is vital we get it exactly right. The patients here get the very best in terms of both personnel and equipment. I'd say in Bastion we are ahead of the National Health Service in terms of dealing with severe and critical trauma casualties."

Colonel Hodgetts and his team were recently named Hospital Doctor and Training Team of the Year by Hospital Doctor magazine for their work in spotting gaps in provision and training the forces how to use new kit.

"We have some very advanced equipment here which is making a substantial difference to the effectiveness of the treatments we give," Col Hodgetts continued.

"The operational imperative has sensitised the procurement process and greatly reduced the time it takes to procure new equipment meaning we get equipment far faster than we ever used to which is a very positive development. We now have a very sophisticated system in place and that is of great benefit to the patients."

"These pieces of equipment allow us to treat casualties quicker and more effectively than ever before. They are life saving pieces of kit."

Chief Petty Officer Sean Rick

The CT scanner is a special type of X-ray machine which can scan a patient in under a minute to give surgeons a highly detailed image of the patient's injuries - it can also 'stream' digital images and data back to specialists in the UK via satellite link, and reconstruct a 3-Dimensional representation of the patient's bones and internal organs.

A vital new capability in situations where minutes can make the difference between life and death, Camp Bastion's CT scanner complements a range of new mobile digital X-ray machines that cut the time it takes to produce high quality X-rays by half.

Radiographer Chief Petty Officer Sean Rick said:

"These pieces of equipment allow us to treat casualties quicker and more effectively than ever before. They are life saving pieces of kit."

