Liquid Adhesive Bandages ELE 282 Jon Doda

The Idea of Liquid adhesive bandaging has been around for quite some time. The first common and practical use dates back to the Vietnam War. During the war lots of soldiers who were injured died of blood loss before they were admitted to health care. This is where the idea to "glue" their wounds shut first came about. Since then liquid adhesive bandages have come a long way. They have virtually taken over the medical world and put sutures on the shelf.



The first company to receive FDA approval for a liquid bandage was Ethicon inc. a branch company of Johnson and Johnson. They developed a technique to close wounds and seal out bacteria named dermabond, meaning bonds to the skin. Early models of this bandage were only found in hospitals. However, after the FDA approval in 1998 over 85 percent of hospitals now carry and use dermabond as their main bandaging technique.

There are many advantages to using a liquid adhesive bandage such as Dermabond. Dermabond is extremely cost effective. It cuts out the cost for tools and even the doctors' fees since any health official can administer it. It cuts out the cost of suture removal since it naturally comes off your body in 5-10 days. Also the materials cost less and are easier to make. The use of dermabond also cuts out the need for needles and anesthetics. Another main reason Dermabond has swept the nation is because of its excellent cosmetic repair. Wounds have been proven to heal up to 4 times faster under dermabond then with sutures such as stitches or staples. In one study, average time to skin closure by physicians was nearly 12.5 minutes with sutures and only 3.6 minutes using Dermabond. Dr. Nichols advocates, "Lacerations or incisions closed with this product look equal to and often better than those closed with traditional sutures or staples".

Dermabond is a clear substance made of Octyl-2-Cyanoacrylate that when applied forms a clear smooth protective layer over the wound. This protective layer cuts out the possibilities of infection but also allows the cut to stay moist and breathe for rapid recovery. Dermabond has been proven 99 percent effective in protecting against the following bacteria: Staphylococcus epidermidis, Escherichia coli, Staphylococcus aureus, Pseudomonas aeruginosa and Enterococcus faecium.

Since Dermabond many other companies have developed similar products. It is now possible to go to a local pharmacy and pick up liquid bandages instead of normal "band-aids". Prices are finally starting to become competitive and I believe sooner or later there will be no more use for "band-aids".

SOURCES:

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