Rapid Repair Wound Dressing

What if we could heal wounds in days rather than weeks without stitches, staples or glue and with minimal scars?

### **Faster** Rapid Repair is a skin dressing that rapidly repairs cuts and lacerations.

In a human study of 30 patients, stitches were successfully removed from excision wounds treated with *Rapid Repair* after only 24 hours. Normally these stitches would need to stay in for 10 to 14 days.

A panel of 17 doctors who reviewed the photo evidence from this study estimated the age of these 1-day old wounds at more than 8 days old.



Stitches successfully removed after 24 hours from the right side of a wound treated with *Rapid Repair*.

#### **Better** Rapid Repair not only reduces healing times but also reduces scarring.



The side treated with *Rapid Repair* has a thin white scar while the control side has a large scar.

This image is from another patient one year after treatment. The right side of the wound, treated with **Rapid Repair**, has a thin scar while the left side treated with a control dressing has developed a large scar.

Bad scar outcomes affect 10% of the world's population. Excessive scarring can limit mobility and have lifelong effects upon a person's physical and mental wellbeing.

## Healing

Rapid Repair produces Faster Better Healing.

These microscopy images are a cross section of the dermis taken at the same stage of healing.

Note the improved density and alignment of the collagen network in the wound treated with *Rapid Repair* compared to the wound treated with conventional stitches.



Right side of a wound treated with *Rapid Repair* compared to left side treated with a control

## **Clinical Evidence**

**Rapid Repair** has been successfully trialed in human excision wounds and in currently being trialed in surgical wounds in animals.

Additional clinical trials are planned to demonstrate the effectiveness of *Rapid Repair* in treating accidental lacerations and surgical wounds in humans.





### How to Use Rapid Repair



A strip of Rapid Repair ready to be cut to size

**Rapid Repair** is available in sheets and strips. The material can be cut to size using scissors.

**Rapid Repair** is painless to apply as no local anesthetic is required.

The wound can be secured using steri-strips or surgical tape.

**Rapid Repair** is then applied along the length of the wound and secured with surgical tape or a conventional dressing or bandage.

After 24 hours *Rapid Repair* can be removed.

## The Theory Behind Rapid Repair

The slowest part of the skin to heal is the dermis which consists primarily of the extracellular matrix containing collagen, proteoglycans and other molecules.

When skin is damaged the extracellular matrix is disrupted and the collagen and other molecules flowing into the wound are unable to align properly.

**Rapid Repair** contains structures that approximate physical properties of the extracellular matrix. These structures project an electromagnetic signature similar to intact skin into the wound so that the molecules flowing into the wound can align as they would in undamaged skin. This dramatically reduces healing times and produces a minimal scar.

# Key Advantages of Rapid Repair

#### Rapid Repair

- Can rapidly repair damaged skin in humans and animals.
- Can replace sutures, staples and glues in most clinical settings.
- Is painless to apply as no local anaesthetic is required.
- Is quick and easy to apply saving time in operating theatres and emergency departments.
- Has a long shelf life of >10 years.
- Is non-toxic and non-invasive.
- Reduces contaminated waste and sharps when used instead of stitches.
- Reduces the opportunity for wound infection.
- Can easily be applied by nursing personnel under supervision of a clinician.

# The History of Rapid Repair

**Rapid Repair** was developed by Dr Rosemary Craig MBBS, FRACGP who spent decades working in hospitals and clinics treating a range of accidental and surgical wounds.

Dr Craig found that often the pain and trauma of wound treatment was as bad as, if not worse, than the original trauma of the wound. This was particularly true in children who often had to be restrained by a parent while local anaesthetic was administered and the wound stitched closed.

#### There had to be a better way.

After many years of research into how the body heals Dr Craig identified the bottlenecks in wound healing and how to potentially overcome them. This led to the creation of the first *Rapid Repair* prototype.

Shortly after, Dr Craig suffered a full thickness cut to her own face. With no other medical staff immediately available, she backed her own research and applied the prototype to her own wound...and it worked!

#### Success.

Dr Craig quickly commenced clinical trials to demonstrate the efficacy of her design with an aim to make *Rapid Repair* the gold standard in wound repair on Earth and beyond...

## Follow Up

To find out more about *Rapid Repair*:







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