

## Report on the Use of *Elasto-Gel™* Dressings in Kenya

District Hospital  
Thika, Kenya

Three types of wounds were selected:

Diabetic Wounds	(2 patients - patient Q and patient X)
Chronic Ulcers	(2 patients - patient Y and patient Z)
Abrasion Wound	(1 patient - patient W)

**Patient W:** Left Leg Abrasion Age: about 22 years

The injury was sustained after the patient had a bicycle accident. The wound had been previously cleaned with savlone and dressed with sterile gauze and bandages. When it was opened and the first *Elasto-Gel™* dressing applied, it was about one week old. As seen on Picture 1, it was a clean wound with granulating tissue starting to form. The first *Elasto-Gel™* dressing was applied and changed on the third day. The reason given was that it had become wet. The patient also complained that it appeared “dirty”. The patient was reassured and the dressing reapplied and left for five days. Cleaning was done with diluted savlone antiseptic. When the dressing was removed, the wound had healed completely with minimal scar tissue (Picture 2).

Conclusion: *Elasto-Gel™* dressings are good for abrasive wounds. They promote rapid healing in a short time. As observed, rapid healing took place in one week, considering that plain gauze had been used one week prior to the application of *Elasto-Gel™*.

**Patient Z:** Right Leg Chronic Ulcer Age: about 50 years

The patient had a chronic wound on the right leg extending over the ankle on the outer side almost to the sole (Picture 3). The patient is a beggar in Thika Town and was included in the program after the good effects of *Elasto-Gel™* were observed on the previously stated wound.

The wound was dirty and smelled offensively. The patient was completely unable to use the affected limb. The wound had little signs of actual healing. According to the patient, the wound had been like that for many years.

For the first ten days, the wound was dressed on alternate days, cleaning being done with diluted savlone. On the tenth day (Picture 4), there was no smell and signs of healing appeared, especially from the edges. From then, the dressing was allowed to remain on the wound for three days.

The above was continued until April 8<sup>th</sup>, 1997 when we ran short of *Elasto-Gel™*. He could now use the limb with aid of a walking stick and the pain was much less. Picture 5 was the last one taken and show that healing had intensified. The actual healing increased from the edges.

Notice the curve (marked “X”) on Picture 4, which is absent on Picture 5. The area marked with a dot (“.”) on all the pictures had continued to heal and is almost absent on Picture 5.

Conclusion: As the odor reduced, the patient felt more comfortable and he was also able to use the limb. The wound was on the road to recovery. Such had not been observed before.

**Patient Q:**                      Diabetic Mellitus                      Age: 60 years

The patient was a male who suffered from diabetic mellitus. He had a wound extending from the root of the toe up to slightly above the foot. The disease was under control, previously the wound used to be cleaned with Eusol/hydrogen peroxide and then dressed with gauze and bandages (Picture 6).

Although the wound was clean, there seemed to be retarded healing, as explained by the medical staff who attended to him. This is also usual with diabetic wounds. The wound was over four months old, cleaning was done with diluted Hibitane each time *Elasto-Gel™* was applied.

Picture 7, taken six weeks later. Dressings having been done on alternate days during the first week and every third day in the second week. After that, the dressing could be left undisturbed for up to five days. The areas marked with dots (“.”) indicate where healing took place. There is not only reduction in size of the wound, but also the color became more “red”, indicating granulation.

Picture 8, taken three weeks later shows further, noticeable reduction in the size of the wound. The outline is also more regular, the healed areas have a minimum scar tissue.

Conclusion: Diabetic wounds do well with *Elasto-Gel™*. It stimulates healing faster than plain gauze.

**Patient X:**                      Diabetic Mellitus                      Age: 58 years

The patient was a male who had diabetic mellitus, with diabetes under control. He had a wound on the side of the right leg which had resisted healing for three months (Picture 9). There was a lot of dead and fibrous tissue. The wound appears small, but more damage was underneath. There was a sinus which drained pus during dressing. Cleaning was done with diluted Hibitane and the first *Elasto-Gel™* dressing was applied.

Picture 10 was taken after six weeks of *Elasto-Gel™* use. No more pus came out, disloughing was about to be done. For the first week, dressing was changed daily. There was intensified oozing after *Elasto-Gel™* was applied. Oozing reduced after first week and dressing was thus changed on alternate days. After disloughing, *Elasto-Gel™* could be left for three to five days.

Picture 11 shows the wound after three weeks. There is increased “red” tissue, no dead tissue, with the fibrous tissue covered. The wound is also less deep. The outline marked with dots (“.”)

is also more regular, has signs of healing with minimal scar formation. The area underneath (marked “X”) is also reduced in Pictures 10 and 11.

Conclusion: *Elasto-Gel™* is good for dirty, infected, diabetic wounds. It prepares the wound well for disloughing and initiates healing faster than plain gauze. Healing also occurs with minimal scar formation.

**Patient Y:**                      Chronic Ulcer                      Age: 12 years

The patient had a chronic wound between the foot and ankle (Picture 12). The patient’s mother said that the wound was over one year old and it just came on its own. Initially the wound was being cleaned with Eusol and dressed with ordinary gauze and bandages. When the initial dressing was removed, the wound looked clean, was extensive involving a part of the foot sole. The *Elasto-Gel™* dressing was applied and the wound was dressed on alternate days for the first one week. After the staff were advised accordingly, they increased the same to three to five days depending on how wet the dressing was. Recovery was remarkable as can be seen on Picture 13, taken about one and a half months later.

It is apparent that recovery had been rapid considering the time the patient has had the wound. The patient was discharged shortly after we ran short of *Elasto-Gel™*.

Conclusion: From the above, one can say that *Elasto-Gel™* is also good for chronic wounds. It was estimated that had the dressing continued for another one and a half months, the wound would probably have healed completely.

## Conclusion

*Elasto-Gel™* is suitable for abrasive wounds, even when the patient is diabetic. Although initially there was anxiety due to the increased “wetness”, both medical workers involved were amazed by the observed fast recovery.

One of the patients complained of increased pain after *Elasto-Gel™* had been applied. This was curbed with mild analgesics. Diabetic neuropathy was thought to be the cause, rather than the *Elasto-Gel™*. None of them was on antibiotics. No infection warranting antibiotics occurred when *Elasto-Gel™* was in use.

On Patient Z, the dressing developed a greenish coloration on the sixth day, but there was no offensive odor. Whatever was thought to be greenish pus, was found only on the dressing itself, otherwise the wound was clean. Due to constraints, a pus swab for culture was not taken, we thus decided the dressing was to be left for not more than five days. The problem never occurred again.

Due to excessive oozing, additional gauze had to be put on top of the *Elasto-Gel™* in some cases. This gauze would afterwards be changed and replaced with a clean one. What was

noticeable was that whatever oozed was not true pus. The oozing also seemed to reduce edema as in Patient X (close comparison of Picture 10 and 11 may indicate less edema in Picture 11 than 10). The oozing also prevented it from sticking on the wound, as gauze does, interfering with the healing. In such cases, elastoplast was used to retain *Elasto-Gel™* on situ.

### **Advantages of *Elasto-Gel™***

1. It does not require to be sterilized.
2. The dressing can only be used for wounds, unlike gauze which may be improvised in other areas. This makes it economical as far as wounds are concerned.
3. *Elasto-Gel™* saves times as it may be retained for many days.
4. It saves strapping as in some areas it can adhere on its own, e.g., abdominal wounds on a bed-ridden patient.

### **Constraints**

In our hospital we have many wounds, while we would have liked to use *Elasto-Gel™* for its good benefits, it was not possible since the material was not readily available.

We would also have liked to broaden the spectrum of use, i.e., to observe the effect on a wider variety of wounds such as extensive burns as well as fresh wounds.

For those wounds that had not healed, we were sorry that we had to go back to the previous dressing material when we ran short of *Elasto-Gel™*.

Excessive oozing also seemed to cause anxiety, not only to the patients involved, but also to the staff. Some thought that the wounds had become infected and thus worsened. Much persuasion and reassurance was necessary.

# Use of *Elasto-Gel™* Dressing on Various Wounds of Dark Skin Patients: Case Studies in Kenya

Maku-Spa Healthcare Center

## Summary

Maspa is a privately owned clinic by KEN/M/FP in Matiliku Market, Matiliku Division Makueni District, about 32 kilometers off the Nairobi-Mombasa Road along the Emali-Wote Road.

The clinic was started in 1993 and has been operational since. The clinic has seen an average of 2,500 diseases per year. The most common diseases treated at the clinic are: CI Mai, URTI, diarrheal diseases and accidents (RTA and domestic accidents), worm infections, etc.

## *Elasto-Gel™*

September 1<sup>st</sup>, 1996, the Senior Nursing Officer Machakos issued the clinic with a pack of *Elasto-Gel™* and some literature. This gel dressing has proven to be very effective in the treatment of chronic ulcers and burns. We have used it effectively on the following:

1. School girl - Chronic Ulcer, 6/12 recurrent
2. Housewife - Extensive burns on the post thigh
3. School boy - Chronic Ulcer on one toe
4. Ten other patients with minor wounds

## Advantages

1. Time saving: This is especially an advantage for school children who otherwise have to come on a daily basis for other forms of dressings.
2. Economical: *Elasto-Gel™* saves use of dressing materials.
3. *Elasto-Gel™* is easy to apply.
4. *Elasto-Gel™* has the ability to absorb and therefore avoids oozing of the ulcers.
5. *Elasto-Gel™* reduces odor of the wound.
6. *Elasto-Gel™* is very effective.