

# Hyaluronate-Iodine (Hyiodine) Complex In The Treatment of Non-Healing Wounds

Shady Macaron MD, Robert A Brenes MD, Stanley J Dudrick MD FACS, Michael S Ajemian MD FACS Saint Mary's Hospital, Department of Surgery, Waterbury, Connecticut

## Background:

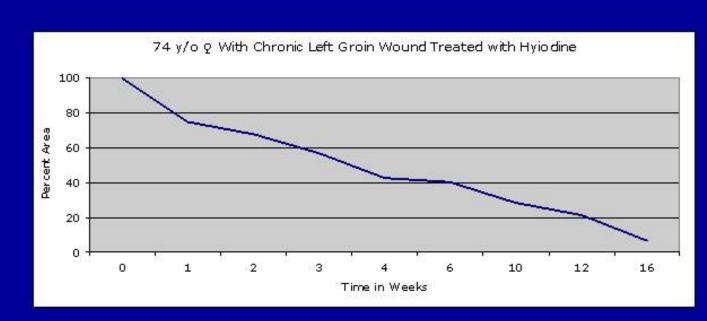
Hyidoine is a complex approved in the European Union, composed of Hyaluronate and Iodine. Combining these two agents has the potential to facilitate wound healing through synergy.

#### Methods:

Hyiodine soaked dressings were applied to non-healing wounds in three patients every other day. Patients were monitored in the Wound Clinic weekly. Measurements of the wound area and depth, and digital photography were used to document wound progression.

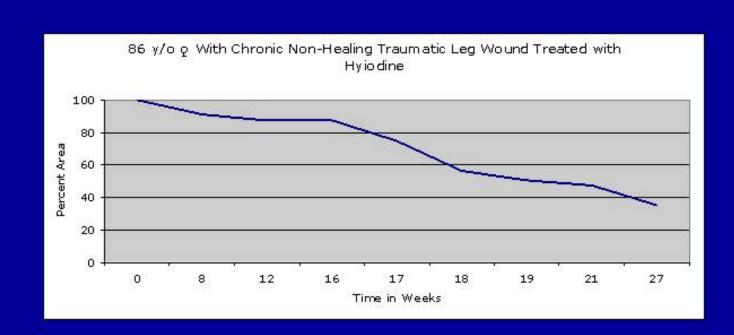
### Results:

The first patient had a 28 cm<sup>2</sup> to 1.8 cm<sup>2</sup> reduction in area over 16 weeks.





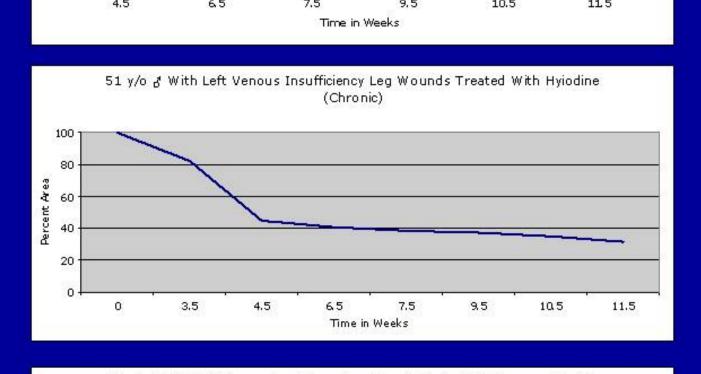
The second patient had a wound regression of 9.9 cm<sup>2</sup> to 3.5 cm<sup>2</sup> over 27 weeks.





The third patient had four wounds, two of which were chronic. Hyiodine was compared with Papain-Urea in in the treatment of these wounds and the data were analyzed using student's t-test. The regression in the chronic wounds using Hyiodine (190.4 cm² to 60.5 cm²) was compared with Papain-Urea (41 cm² to 21.2 cm²) over 11 ½ weeks, t=0.008. Similarly, regression in the newly developed wounds over 7 weeks were compared; Hyiodine (50 cm² to 27.36 cm²) versus Papain-Urea (11.6 cm² to 9.93 cm²) t=0.00002.

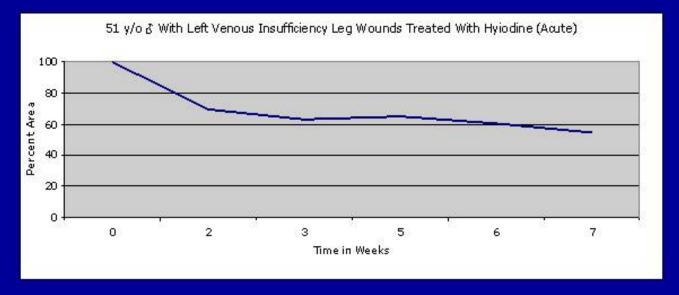
#### **Chronic Wounds**



51 Wo 🗗 With Right Venous Insufficiency Leg Wounds Treated With Accuzym

100 80 40 20 0 2 5 6 Time in Weeks

**Acute Wounds** 



### **Conclusion:**

In this pilot study, enhanced and accelerated wound healing was noted, which is believed to be induced by the combination of Hyaluronate, a molecule with immune cell activation, angiogenic properties and strong water affinity, and lodine, a molecule with strong antimicrobial activity. An expanding study is currently in progress.