

# Case Report: Managing Infected Carbuncle through Combination Therapy

## (Silver Antiseptic Spray, ChitoDebrid Gel, ChitoHeal Gel, and Chito Powder) in PKD Kota Tinggi

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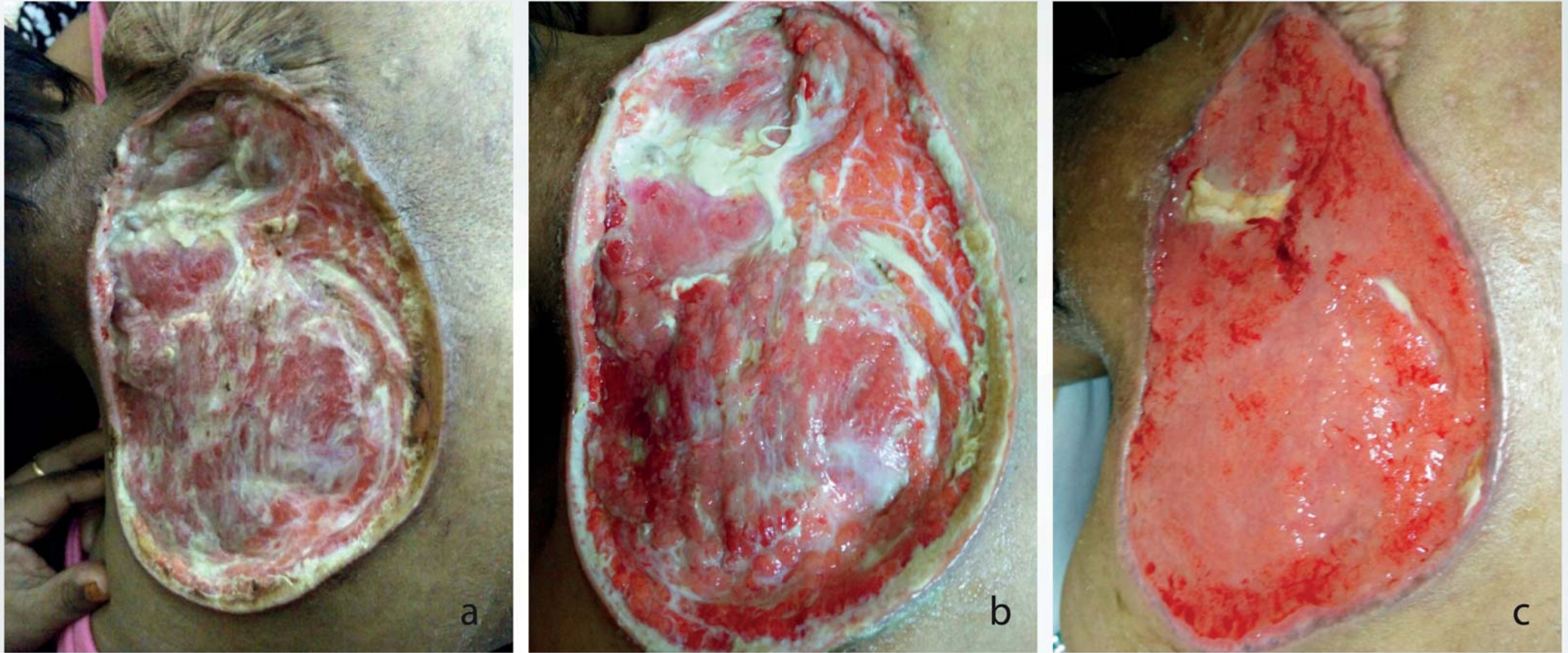


Figure 1: Carbuncle in a 36 Y/O DM patient with EOD dressing frequency. Baseline (a), after 3 days (b) and 21 days (c).

### Introduction

Carbuncle is a red, swollen and painful cluster of boils that are connected to each other under the skin. In this case study, we present a 36 years old female patient with underlying Diabetes Mellitus (DM) who suffered from infected carbuncle post saucerization intervention. Patient discharged from Hospital Sultan Ismail and continue follow up at KK Bandar Mas. Size of the wound and the diabetic control became the main issue for progress of wound healing.

### Materials and methods

These materials were applied during the treatment.

Day 1-17

- 1) Water for irrigation as cleansing solution
- 2) Spray Silver Antiseptic Spray (SAS) generously
- 3) After 45 secs, apply ChitoDebrid Gel (CDG)
- 4) Use secondary dressings to cover the wound

Day 18 onwards

- 1) Spray Silver Antiseptic Spray (SAS) generously
- 2) After 45 secs, sprinkle ChitoPowder (CP)
- 3) Apply ChitoHeal Gel (CHG)
- 4) Use secondary dressings to cover the wound
- 5) Dressing changed every 2 days

### Results

Impressive wound healing rate can clearly be monitored starting from day 2 to 21. The slough amount also reduced drastically within 17 days. Good granulation and cells epithelization activity observed lead to a faster wound closure.

### Discussion

In this study, the effect of SAS, CHG, along with the support of CP and CDG were investigated on a carbuncle wound. The aim was to demonstrate the effectiveness and the rate of wound healing by using these advanced woundcare products.

Nanocolloidal silver in SAS expressed a great antimicrobial properties. Its active form of colloidal and nano size silver effectively helps to combat microorganism on the wound<sup>1</sup>. Chitosan biopolymer in CHG applied has a unique chemo-attractant properties, localizing macrophages, cytokines and other vital micro molecules involved. It also helps to provide moist environment for wound healing<sup>2</sup>.

CDG used contains sodium alginate and proteolytic enzymes which promotes both, autolytic and enzymatic debridement. Slough and necrotic tissues can be easily softened and removed without involving any surgical procedure. CP derived from plant cellulose biopolymer helps to catalyze and jump start the granulation process.

With the easy and effective usage of this combination therapy, the wound can be healed faster. Patient and caretaker will be able to perform dressing as well. Cost effectiveness and the psychological benefits for the patient are beyond calculation<sup>3</sup>.

### Conclusion

Combination therapy of SAS, CHG, CDG and CP is safe and effectively increased the wound healing rate, thus, lead to a significant cost savings in community settings.

### References

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