

Muniandi M.V., Ahmad AR., Ayu F. Abdul Sani., Subramaniam S., Belik J., Mohd Ripin M.S., Johari R.
Wound Care Unit, Department of Orthopaedics Hospital Tuanku Ja'afar, Seremban.

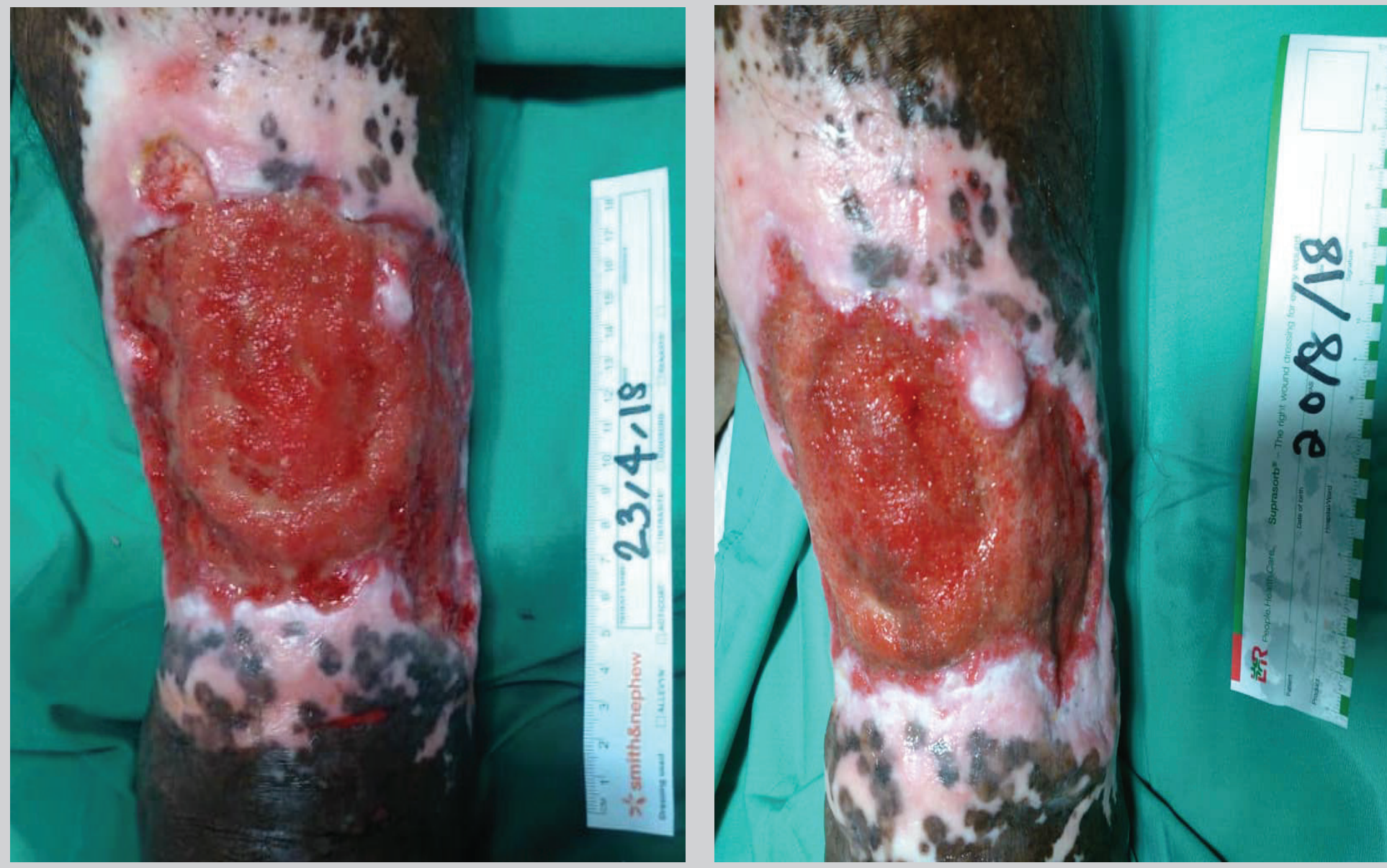
INTRODUCTION

Chronic wounds are usually associated with pain, exudate, odour and infection. Controlling all this three factors will fasten the healing process and improve quality of life of patients. Microbes are entrapped by Van Der Waals forces of activated carbon. This reduces Inflammation and exudate level. Carbon is a known material to reduce odour. The electrical stimulation due to conductivity and electrical current of carbon molecule van der Waals force, promotes wound healing and decreases pain.

CASE REPORT :

Case 1 :

57 year old Indian male. Known case of poorly controlled diabetes mellitus and hypertension. Right leg ulcer increasing in size for the last 2 years. Wound size 15x10x1.0 cm. Heavily exudative; foul smelling; Pain score 5-6. Daily dressing at out patient clinic.



Case 2 :

50 year old Indian male. Known case of diabetes mellitus and Asthma. Wound over right leg for the last 2 year. Wound size 7X6 cm. Wound noted to be foul smelling; heavily exudative; Pain score 5-6. Daily dressing and nearest outpatient clinic.



Case 3 :

70 Years old Chinese female. Known case diabetes mellitus and hypertension. Wound over left leg for the last 8 years (12X10cm). Patient does BD dressing due to heavy exudate; foul smelling; pain score 6-7.

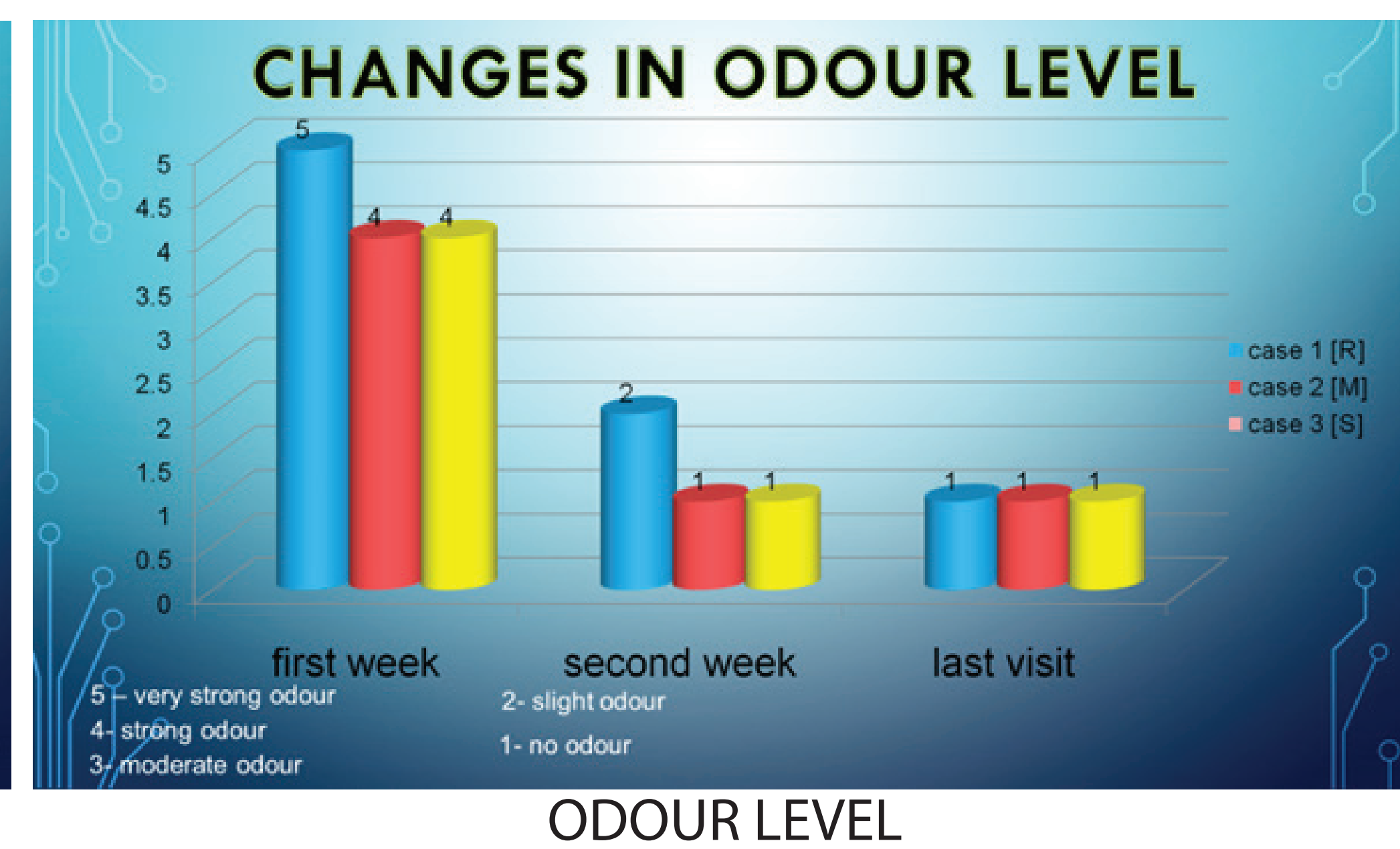
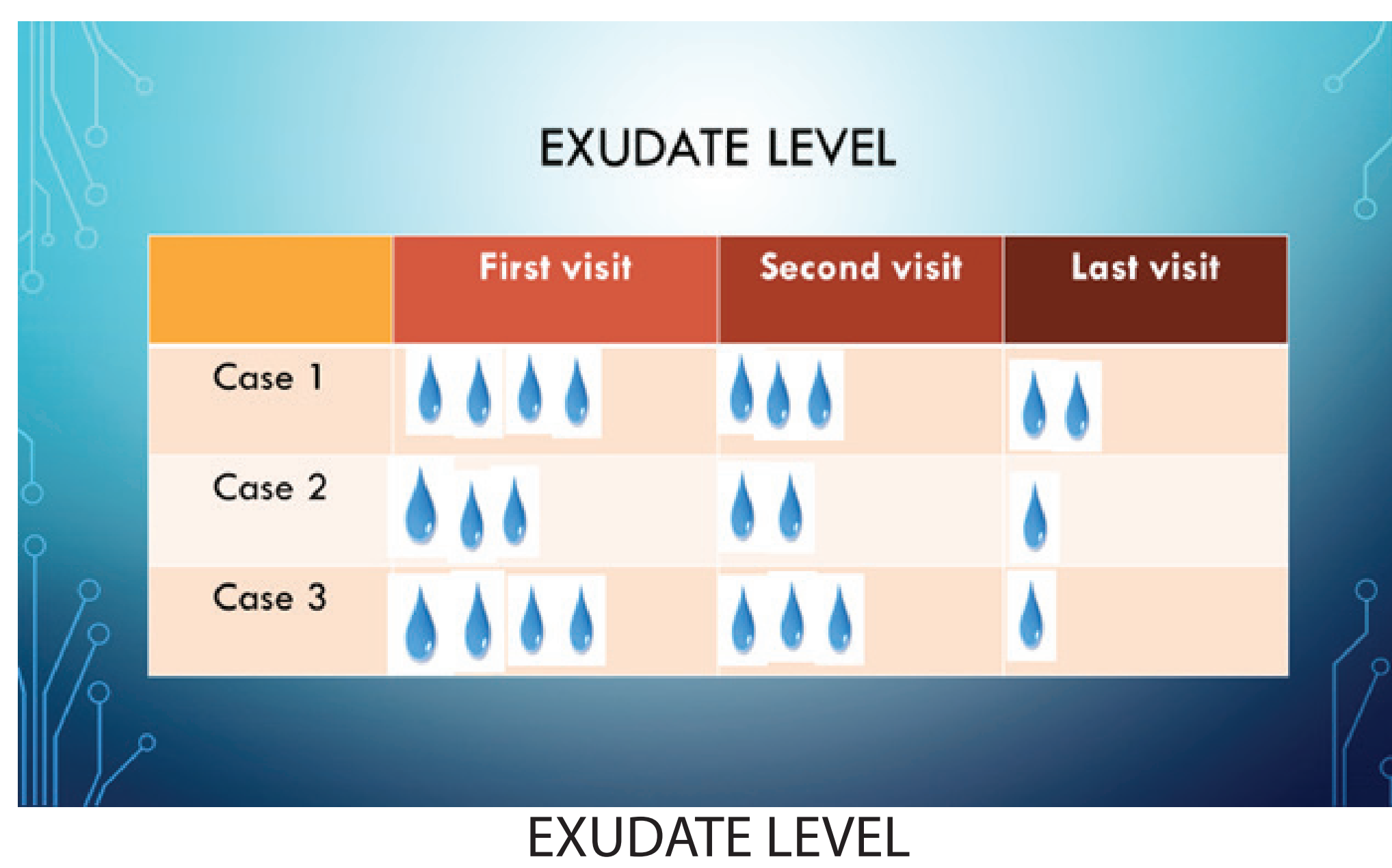
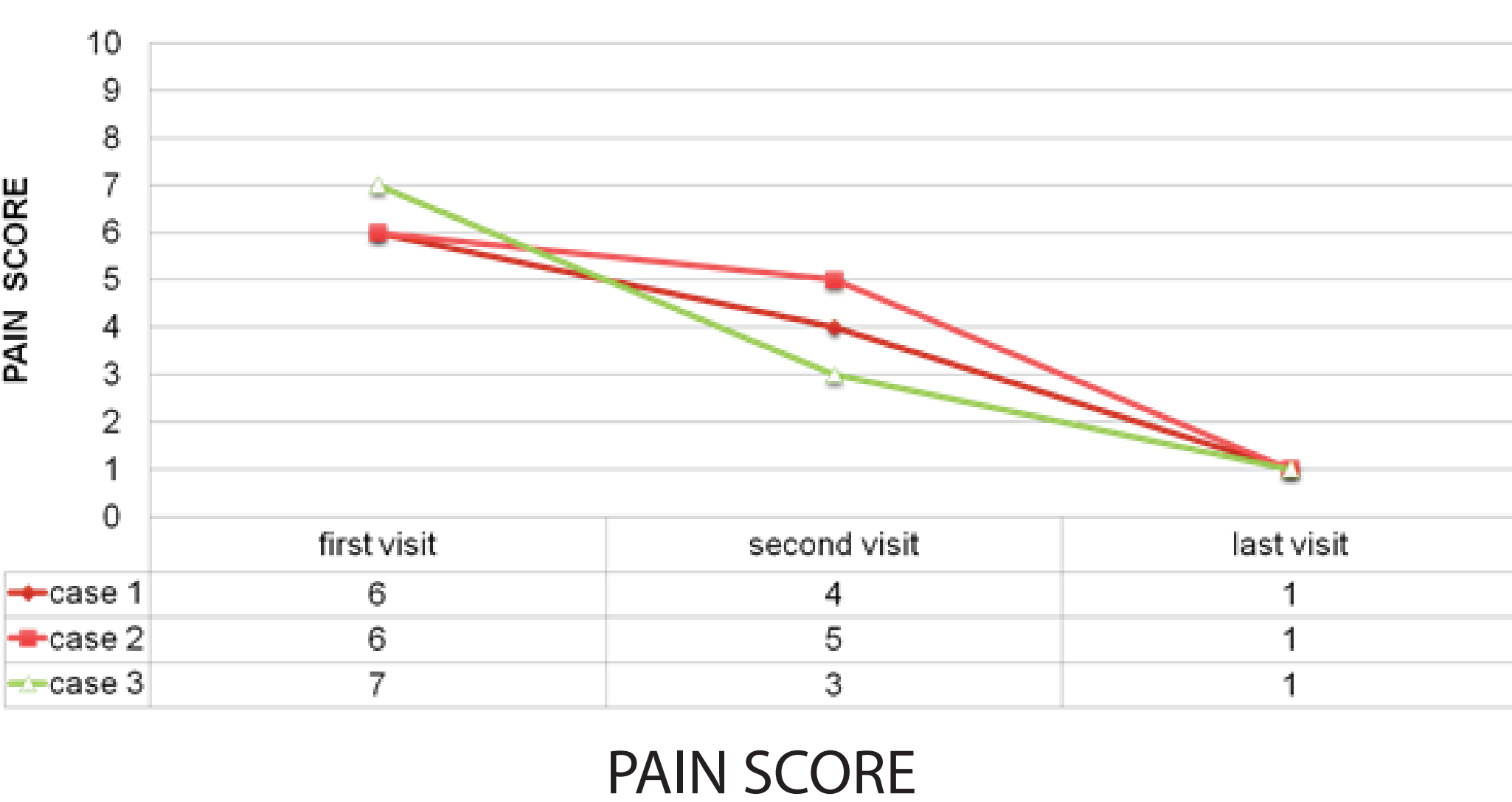


METHODOLOGY

All 3 patients considered to be chronic non healing wounds were selected. Total of 3 cases treated with Zorflex®. All cases undergone wound bed preparation. Patients were followed up monthly basis. Patients wound size, odour level, exudate level and pain score(VAS score) documented.

RESULTS

All 3 cases shown significant reduction in wound size. **Case 1:** 13 % reduction, **case 2:** 47% reduction and **case 3:** 47% reduction. All cases shown significant reduction in odour, pain(VAS score) and exudate level.



DISCUSSION

Activated carbon cloth dressing used in this case study is Zorflex® manufactured by Chemviron, UK. It contains strong electrostatic forces known as Van-der-Waals forces, which help to trap and kill microbes, control exudate level and achieve good odour control. Besides that, it is able to regulate level of matrix metalloproteinases (MMPs), which the level is usually uncontrolled in chronic wounds like venous ulcer, one of the main reasons for poor wound healing. Moreover, it can stimulate wound healing by its conductivity, and can be left up to seven days on the wound, which makes it a cost effective wound dressing compared with other conventional dressings.

CONCLUSION

Activated carbon cloth dressing, Zorflex® able to accelerate wound healing. In this evaluation Zorflex® demonstrated a strong ability to diminish and alter the bacterial loading of wounds which reduced associated pain, malodour and exudate. It is a very cost effective dressing material which provide all the above benefits to heal the wound and at the same time provide comfort to the patients.

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