

Electrical tape used in wound dressing, a curse?

Case report

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Abstract

Introduction

Carbuncle is a staphylococci infection. The back is the most common site for carbuncle. A case of carbuncle on the back which was not healing is reported.

Case report

A 60-year-old non-diabetic female presented with a non-healing ulcer on her back for 12 days. Electrical tape was used for holding the dressing.

Conclusion

The case reflects non-healing by use of the electrical tape and the need of more free health to the poor.

Introduction

A carbuncle is a necrotising cutaneous and subcutaneous infection usually caused by *Staphylococcus aureus*¹. The back is a common site for occurrence of carbuncle. The carbuncle appears like a sieve, composed of a cluster of boils or furuncles, with multiple draining sinuses. Medical tape is used to hold a dressing on the wound. Using an electrical tape as an adhesive is very rare to see. This is a potential hazard to the wound. This paper discusses the effect of electrical tape used in wound dressing.

Case report

A 60-year-old non-diabetic female presented with a non-healing ulcer on her back for 12 days. She had taken antibiotics of her own

and had impartial drainage and was advised to have daily dressings at home by a non-clinician. On examination, black electrical tape was used as a skin adhesive for 6 days (Figures 1 and 2). Local examination revealed carbuncle on the back. She had debridement and was prescribed antibiotics and advised not to use electrical tape as skin adhesive. The patient had dressings in hospital and was discharged after satisfactory healing of the wound. She was residing at a far-flung rural mountain area and had very difficult access to nearby centres. Financial constraints and difficult access lead her husband to dress her wound and use electrical tape as a skin adhesive.

Discussion

Carbuncle is a collection of boils and is a debilitating disease². A carbuncle starts as a furuncle, infection dissects through the dermis and subcutaneous tissue in a myriad of connecting tunnels which open up on the

surface. As it enlarges, blood supply to the central part gets disrupted and leads to central necrosis. This may be seen in patients who have diabetes, immunodeficiencies, obesity, or sit for a prolonged period of time^{3,4}. Most of the carbuncles are caused by methicillin resistant *S. aureus*, non-resistant staphylococci and streptococci and rarely by the *Granulicatella adiacens*⁵. Culture of the wound often helps in identifying the organism. Systemic symptoms are present in the carbuncle.

Early debridement and proper antimicrobial drugs give adequate treatment for carbuncle⁶. Excision of these infective lesions may lead to large defects prolonging hospital stay⁴. Wound care after cutaneous surgery can play an integral role in wound healing⁷ and often heal with residual scarring. Proper wound care dressing provides the right environment to promote healing in a carbuncle wound. Using medical tape to hold dressing is important in wound care of carbuncle. This surgical tape



Figure 1: Electrical tape used in wound dressing.



Figure 2: Carbuncle.

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is often white containing zinc oxide, which absorbs fluid and prevents infections.

Using electrical tape as holding for dressing is unfortunate. Ignorance, poverty and financial constraints to buy surgical tape leads to such a calamity. Electrical tape is made from leaded polyvinyl chloride. Using this tape poses a potential risk to those who handle it or use their teeth to break as lead is transferred. This is well known in pathogenesis of occupational cancers. Electrical tape has the ability to keep the flow of oxygen from reaching skin so impeding healing if used in holding surgical dressing. There is still a need for more easy health access in rural areas.

Conclusion

Use of electrical tape as an adhesive is a hazard. Such practice should be avoided.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

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