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A practical offer for hypospadias dressing: Allevyn®

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ABSTRACT

Introduction: An ideal hypospadias dressing material must be cheap and non-allergenic. It also must be easily and quickly applied, non-adherent to the incision, effectively absorb the leakages of the wound, pressurise the flaps and grafts effectively, without damaging the blood circulation, protect against infections, and must be easily and painlessly removable. We use a product that is produced for healing chronic wounds and burns, Allevyn Adhesive®, as a wound dressing after hypospadias surgery and circumcision. **Materials and Methods:** We included 61 hypospadias and 85 circumcision cases operated in our clinic between November 2007 and August 2010, for the study. Allevyn Adhesive® dressing was used in all the cases. For approximately every 10 patients a sheet sized 22.5 x 22.5 cm was used. **Results:** We did not meet any difficulty in application and removal of the dressings and the dressing could be performed easily even by inexperienced health personnel. The cost of the application is about $5 for each case. We did not encounter any complications with regard to the dressing during the follow-up. **Conclusion:** We did not encounter any of the complications with Allevyn Adhesive® that were seen with the use of traditional dressing products, such as, problems with removal of the dressing, development of maceration secondary to inadequate absorption of leakages from the wound, cohesions of the wound lips, and infections and necrosis of the flaps and grafts, secondary to erroneous locations of the dressings. There was no additional therapeutical cost due to the use of this product. For these reasons we thought that Allevyn Adhesive® is a good alternative for the dressing of hypospadias and circumcision.

Key words: Dressing, post-hypospadias, circumcision

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INTRODUCTION

Hypospadias is a malformation well known for centuries and several surgical and non-surgical treatment options have been proposed for its treatment. Although it varies geographically, the mean incidence of hypospadias is one in every 300 live births (0.3%). About 300 different surgical approaches have been described and used for hypospadias.[1] A wide range of techniques also apply to wound dressings after surgery. Numerous variations in the type and style of the dressings have been proposed. An ideal hypospadias wound dressing must be cheap and non-allergenic. It also must be easily and quickly applied, non-adherent to the incision, it must effectively absorb the leakages of the wound, pressurise the flaps and grafts effectively, without damaging the blood circulation, thus preventing hematoma formation and helping wound healing, protect against infections, and must be easily and painlessly removable. Also, it must keep its shape while letting the patient move as much as he likes. We wanted to share our experience with a product that is produced for healing chronic wounds and burns, Allevyn Adhesive®, as a wound dressing after hypospadias surgery and circumcision.

MATERIAL AND METHODS

We included 61 hypospadias and 85 circumcision cases operated in our clinic between November 2007 and August 2010, for the study. All cases had been dressed with Allevyn Adhesive®. For approximately every 10 patients a sheet sized 22.5 x 22.5 cm was used. The sheet was cut according to the penile length and circumference and placed to include the incision line.

RESULTS

Their age was between eight months and 16 years. Besides circumcision, 35 cases (57%) had distal hypospadias, 14 (23%) had proximal hypospadias, and 12 (20%) had urethral fistula.

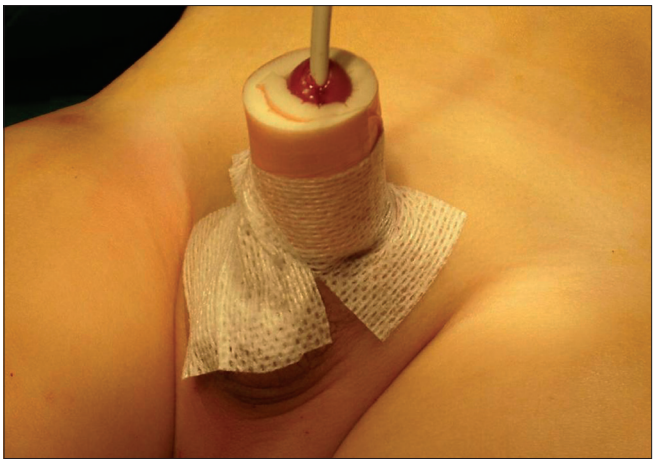


Figure 1: Hipospadias dressing with Allevyn Adhesive®



Figure 2: Circumcision dressing with Allevyn Adhesive®

The dressings stayed for about two to four days, depending on the operation performed [Figures 1 and 2].

The dressings were easily removed. Even inexperienced nurses could remove the dressing. The approximate cost of the dressing was $5 per patient. No complications due to the use of the dressing were encountered on follow-up.

DISCUSSION

One of the necessary parts of modern hypospadias surgery is appropriate wound dressing after most of the operations. Several different materials have been used for this purpose, including petrolatum gauze, silastic foam,[2] elastic bandage,[3] glove finger,[4] Opsite,[5] and Coban bandage™. All the above-mentioned materials cause different problems both for the patient and for the surgeon.

Whitaker *et al.*[2] offered silastic foam dressing, especially for complicated hypospadias cases. The authors explained that silastic foam dressing was especially useful in cases where wide dissection was made and flaps were used. As can be understood from their article, the application of this dressing was complicated, needed skill, and extended the operation time. The dressing was heavy and bulky. Removal of the dressing was also a complicated process. There was no information about the cost in this article.

Singh *et al.*[3] offered elastic and Velcro bandage in their article. As the application was quick, painless, and atraumatic, they thought that this material was suitable for hypospadias surgery. The authors wrote that the dressing was changed on postoperative days 5, 10, and 15. Even a painless and quick dressing change may be a stress for little children and their families. The same author also proposed cut glove fingers as a dressing especially for child hypospadias cases.[4] He admits that this material could not be used for scrotal and perineal hypospadias cases. Another problem was that this material did not have exudate absorbing capacity.

In another study, Searles *et al.*[5] described a dressing that they named as SANAV (Saved A Nurse A Visit). The dressing material here was a combination of Inadine, a non-adherent dressing material and an OpSite sheet. It was a complicated dressing and needed skill for application.

Sürer *et al.*[6] offered Granuflex® in a recent study and claimed that this material had the necessary properties as a hypospadias dressing. The dressing might need a renewal, which was a drawback of Granuflex.

Allevyn Adhesive® is mainly a wound care product, but it is easy to use, cheap, effectively absorbant, can be easily removed, mobilisation of the patient is not a problem, the penis is well stabilised, and the dressing provides an effective pressure on the flap. All these properties make it a product of our choice as a hypospadias surgery dressing.

Our clinical experience and few other reports have also shown that the Allevyn Adhesive® is also very effective in preventing mucosal bleeding after circumcision, which is a stressful condition both for the family and the surgeon.[7]

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