Are medicated adhesive bands at the phlebotomy site useful?

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Dear Sir,

It is usual practice to apply a medicated adhesive band at the site of phlebotomy after blood donation with the donor being instructed to remove it after a few hours. The purpose of this is to prevent infection at the site of phlebotomy and provide an occlusive cover to enhance healing. Blood Bank personnel often come across a donor reporting back to the Blood Donation Centre with a rectangular area of reddish discoloration accompanied by itching at the site of phlebotomy. The rectangular area usually corresponds to the area on which the medicated part of the adhesive band had been applied or rarely to the area corresponding to the adhesive. The cause of this is usually allergic contact dermatitis to the topical antimicrobial present on the adhesive band or to the adhesive material on the band.

Post donation, hemostasis can be attained by applying a pressure dressing rather than adhesive tape [1]. It is a

better practice to use a sterile swab to apply pressure at the site of phlebotomy with the arm slightly raised for 5–10 minutes after donation. Once hemostasis has been achieved the wound created by the phlebotomy is temporarily sealed until healing occurs. The risk of infection at the site of venepuncture is very low. According to a study in Detroit it is estimated to be 1 in 200,000 donations [2]. On the other hand, allergic reactions to topical antimicrobials are quite common ranging from 1% to as high as 15% (Table 1) [3]. The effectiveness of topical antimicrobials in preventing infection at the site of venepuncture is also not proven [4]. Allergic reactions to the adhesive material also occur albeit less commonly besides adhesive tapes may also cause irritation due to removal of arm hair during removal. These minor reactions though not serious may prove to be a hindrance in retention of novice donors [5].

As the site of venipuncture is generally not at risk of infection the application of a medicated adhesive band should be avoided to reduce the risk of ACD. Furthermore, to our knowledge the advantage of covering the phlebotomy site with an adhesive band has never been studied. The following issues also require attention – Are topical antibiotics really effective in preventing infection at the site of phlebotomy? Does this benefit outweigh the risk of contact dermatitis in the donor?

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Table 1 Contact sensitivity to commonly used topical antibiotics in different populations

Topical antibiotic	Contact sensitivity (range)
Neomycin	1–6%
Gentamicin	7–10%
Bacitracin	8–15%
Polymyxin B	4.6–14%

(Based on the data from Ref. 3)

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Announcement

Dr J C Patel Medical Research Foundation is organizing Fifth Conference on Iron Deficiency at Shanti Sarovar, Hyderabad on 5–7 February 2010. Early registration closes on 31/8/09. Only first 150 out-station delegates would be registered and would be provided free accommodation. Local delegates not requiring accommodation will have unrestricted registration. Last date for submission of abstracts for free papers is 15/11/09. All accepted abstracts would receive cash awards based on merits. For details visit www.ghrc-bk.org