

ABSTRACT

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What skin cancer procedures warrant antibiotic prophylaxis? – a prospective study

Method

We undertook 3 year prospective study of 5169 lesions, (predominantly non melanoma skin cancer) treated on 2455 patients from July 2002 to June 2005. No patient was to be given prophylactic antibiotics and no patient would have warfarin or aspirin ceased. Aim of study was to identify wound sites / procedures where infection incidence was over 5% such that these circumstances may warrant antibiotic prophylaxis.

Results

Overall infection incidence was 1.51%.

Individual procedures had the following infection incidence: curettage (n=412) 0.73%, skin flap repairs (n=1601) 2.94%, simple excision and closure (n=2974) 0.54%, skin grafts (n=69) 8.70%, imiquimod topical therapy (n=78) 3.85%, wedge excision (n=35) 8.57%.

Analysis of regions of the body demonstrated that surgery below the knee (n=458) had an infection incidence of 6.99% ($p < 0.0001$). Sub-analysis demonstrated all regions below the knee were at high infection risk. Elsewhere, groin excisional surgery (n=10) had incidence of 10% ($p = 0.027$). Elsewhere, no other body site demonstrated an infection incidence over 4% of statistical significance.

Procedures to the face (n=2268) demonstrated infection incidence of 0.88%.

Diabetic patients and those on warfarin and / or aspirin and smokers had no difference in infection incidence.

Conclusion

Based on a prediction of infection incidence over 5%, the following cutaneous oncologic procedures warrant consideration of oral antibiotic prophylaxis; all procedures below the knee, wedge excisions of lip and ear, all skin grafts, and lesions in the groin.

Other than in these circumstances, surgery to the nose, ear, fingers and lips, skin flap surgery, surgery on diabetics, smokers and those on anticoagulants have previously been considered for antibiotic prophylaxis but do not warrant such intervention based on our data.



"Sun damages skin"