Pin tract infection is the most common problem during limb lengthening involving external fixation, with an incidence as high as 85%. The most appropriate pin-site care is controversial; one study even justifies a nihilistic approach. Pin sites near joints are more prone to sepsis, as they are subject to greater movement. Minor inflammation or superficial infection is usually treated with antibiotics, local wound care, and occasionally pin removal. Osteomyelitis warrants surgical intervention.

In this issue, Rahimnia et al. used antibiotic-coated pins to prevent pin-tract infection in 4 out of 5 rabbits. However, the study sample was small. The results should be corroborated by those of larger randomised controlled studies to negate possible biases. It is uncertain how long antibiotic-coated pins are effective. Silver-coated pins and stainless steel pins yield no detectable difference in the rates of pin tract infection. Copper and titanium pins enable reduction of infections but not significantly. Lipid-stabilised hydroxyapatite-coated pins are effective for as long as 20 weeks and have lower infection rates than conventional uncoated pins.

It should be emphasised that any strategy to reduce infection begins in the operation theatre. Stop-start drilling with cooling reduces thermal damage and lessens the risk of ring sequestra. Immediate use of pressure dressings and removal of any visible blood from the skin, especially around the pin site, also decrease bacterial proliferation within haematomas. Pin tract infections are an area of concern and much more evidence is required to formulate guidelines to decrease its incidence and hence burden on health care.

REFERENCES


Commentary: Antibiotic-coated pins for prevention of pin-tract infection: a rabbit study

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