

MAIL³⁶⁰

We'd like your views – write to: The Editor, *Bone & Joint*³⁶⁰,
22 Buckingham Street, London WC2N 6ET or email editor360@boneandjoint.org.uk

Dear Sir,

I am writing to express my concern regarding the concept of evidence-based medicine in orthopaedic surgery.

As a medical student, an orthopaedic resident and now a young consultant, I have been rightfully taught to guide my medical practice based on evidence. However, this appears to be seldom translated into common daily practice globally.

There is a lack of scientific evidence for most of the treatments we commonly undertake. For example, many thousands of suture repairs for rupture of the Achilles tendon are performed annually worldwide. The same may be said of the completely torn rotator cuff of the shoulder. However, the respective guidelines from the American Academy of Orthopaedic Surgeons (AAOS)^{1,2} showed only weak evidence that these were the correct surgical treatments. Furthermore, of 16 recommendations for diagnosis and treatment of rupture of the Achilles tendon, eight were inconclusive and two were consensus based. For the completely torn rotator cuff, of 25 recommendations, 16 were inconclusive and two were consensus based.

Even when evidence exists that a treatment may not work, medical practitioners sometimes ignore this. For example, another guideline from the AAOS³ recommends glucosamine and/or chondroitin sulphate or hydrochloride should not be prescribed for patients with symptomatic osteoarthritis of the knee; this has a grade I level of evidence. In clinical practice, however, glucosamine and chondroitin sulphate are widely used dietary supplements for osteoarthritis, with an estimated sale approaching \$730 million.⁴

In other cases, the evidence available does not always match the clinical experience of an individual surgeon. For example cemented total hip

replacements have significantly lower rates of revision compared with cementless designs, both in men and women, young and old. This has been clear from the Scandinavian registers^{5,7} for many years, while newly published data from the National Joint Registry for England and Wales⁸ have provided further evidence. However, these same registries also show that every year the use of cementless implants continues to increase.

Why is that? Do we ignore the evidence that faces us? Do we take from the various registries the information which suits our cause? Or, is our individual clinical experience different to the experience of the majority?

Whatever the answer, it appears that presently we may not be practising evidence-based orthopaedics in all subspecialty areas. The scientific community should perhaps focus its efforts to support high-level studies in order to allow surgeons to change their practices on the basis of the evidence produced.

**Alessandro Aprato, MD Ortho, Consultant Orthopaedic Surgeon
Ospedale S. Luigi Gonzaga di Orbassano, Orbassano, Italy**

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