Antibiotic prophylaxis: Is prevention always worth the cost and risk?

Is an ounce of prevention worth a pound of cure? The answer depends on how effective, toxic, and costly the ounce of prevention is relative to the pound of cure. Another important factor is the likelihood that the cure will be needed in the absence of preventive measures. It can be a complex question, especially when data are limited, and in this issue (page 351) Dr. Thomas Keys addresses it as it pertains to the use of antibiotics at the time of dental work in patients with joint implants.

If a joint implant becomes infected, it generally has to be removed surgically, and the patient must receive prolonged antibiotic treatment before a new implant can be inserted, although newer approaches have modified this to some extent. If the infection relapses, the whole process has to be repeated. Meanwhile, the patient may have no joint at the affected site. It is an understatement to say that this is not good, especially if a weight-bearing joint is involved.

Dr. Keys points out that, although this scenario is unlikely to occur even without preventive antibiotics, it can occur, with the disastrous results described above, especially in patients who for various reasons have a high risk of infection. Based to a great extent on his clinical judgment and years of experience, he concurs with the 1997 joint recommendation of the American Dental Association and the American Academy of Orthopaedic Surgeons that prophylaxis is indicated only when such risk factors are present. While, as is the case with most questions that have not been prospectively studied, total unanimity does not exist on this point, most of the medical literature since that time indicates general agreement with this position. So read the article, mull it over, and, if the spirit moves you, let us know what you think.

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REFERENCES