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Moxifloxacin

A Viewpoint by L.C. Parish

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Moxifloxacin is a new oral 8-methoxy fluoroquinolone. The methoxy radical at the 8-position and an S,S-configured diazabicyclonoyl ring at the 7-position provide better antibacterial activity than that of other quinolones. The half-life of 11.5 to 15.6 hours means that once-daily dosing is possible, making it highly advantageous in dermatologic practice.

This new fluoroquinolone has excellent activity against many of the major pathogens, which create cutaneous pyogenic infections,[1] some of which may be increasingly resistant to other quinolones. Susceptible organisms include several Gram-positive bacteria, such as methicillin-resistant *Staphylococcus aureus* (MRSA) and β-haemolytic streptococci, and Gram-negative bacteria, including *Escherichia coli* and *Proteus mirabilis*. *Mycobacterium leprae* may also be killed by moxifloxacin.[2,3]

The bioavailability of moxifloxacin is reduced when the patient is taking antacids and iron supplements; patients with dermatologic conditions can easily avoid these agents during therapy with moxifloxacin. In addition, there is no cytochrome P450 interference. Concomitant administration of digoxin, glyburide, probenecid, ranitidine, theophylline and warfarin will not be a concern.

The incidence of photosensitivity is minuscule, unlike the situation with some quinolones. Of the reported untoward effects, nausea, diarrhoea and/or dizziness occurred in no more than 8% of patients.[2] In our experience, this has not been a problem.

Moxifloxacin will be most useful in dermatologic patients because of its wide bacterial spectrum, ease of administration and minimal adverse effects. While quinolones may not be the first choice of dermatologists, who often chose a macrolide or a cephalosporin, this new agent should become the preferred choice when a quinolone is indicated. ▲

References

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