

An Audit of Ciprofloxacin Use in Severe Life Threatening Infection at the AKUH

Pages with reference to book, From 25 To 26

Madam, a recent valuable article (JPMA 45: 147, 1995) by D. M. Khan and Z. A. Bhutta of AKU on the use of Ciprofloxacin in childhood has appeared at an opportune time. Although the use of fluoroquinolones in the paediatrics age group has remained controversial because of the risk of particular toxicity, many countries - including our own, have been increasingly involved in their prescription.

Since such use - or abuse? - is of importance and interest, may I comment:

1. Quinolones have been in use in children for many years¹ ever since the "parent" Nalidixic acid (1962) became available in pediatric suspensions; this was followed by Pipemidic acid (1973) and a seemingly unending string of "adult" broad-spectrum fluorinated varieties such as, Ciprofloxacin, which was released in the US in October, 1987. The authors refer to the latter as a "new" drug, though many others such as Fleroxacin, Clinafloxacin, Sparfloxacin, etc have much more recently evolved.

2. There were three concerns for the use of quinolones in children. Although the most discussed problem is a risk of arthropathy²⁻⁵, two additional problems remain: development of metabolic acidosis, and intracranial hypertension in nursing infants^{6,7}. No doubt, in young animals these drugs produced major and irreversible damage to weight-bearing synovial joints⁴, but this was not observed in children^{5,6,8}. Indeed, by the end of 1991, there were data on the use of fluoroquinolones for various indications in more than 1500 children⁵. These findings, along with an excellent study⁷ in 1994 using MRI in children receiving Ciprofloxacin or Ofloxacin, recognised transient arthropathy or reversible arthralgia in only 1.3% of cases. These relevant reports, incidentally, were not included in the authors list of 31 references.

3. The authors have listed 5 single isolates (Pseudomonas, etc) among their 20 positive cultures (Table II) and reported each of their sensitivities to the antibiotics tested as "100%" or "0%" (Table III). The mention of sensitivity "percentage" for a single isolate is grossly invalid: simple "S" or "R" is technically appropriate.

4. In "Discussion" the tenu "prokaryocytes" is incorrect: there is no such word in the dictionary. "Prokaryotae", indicating the bacterial Kingdom (excluding Mycoplasma), is the legitimate one.

5. I wonder why the outdated spelling "Gentamycin":

Footnote, Table III) persists when the correct one is "Gentamicin" (with an "i"), since this aminoglycoside (and Sisomicin) are obtained from *Micromonospora* spp, not *Streptomyces*.

6. Minor lapses in final proof-reading are rather unusual in an indexed journal: the year of edition is not given in Reference 1; extra "s" appears in 4,5,6,24,25 and 28; and an "1" is missing in 27 (Ampicillin). But the importance of the article cannot be over-emphasised.

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References

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