

Reply

Pages with reference to book, From 26 To 27

Madam, We read with interest the comments by Professor Essa Abdullah on our submission on “An audit of Ciprofloxacin use in severe life threatening infection at the AKUH”.

Professor Abdullah makes several valid comments pertaining to proofreading, which are pertinent. The correct spellings are indeed ‘gentamicin’ and ‘prokaryotic’. Similarly the reason we expressed resistance figures as a percentage for all isolates, was to avoid presenting data in a complex table or two different tables. These minor points do not detract from the main message of our paper.

Notwithstanding, the aforementioned points, the main issue that Professor Abdullah raises is one that should be debated actively now. We disagree with the contention that sufficient data exists to give a carte-blanche approval for quinolone use in the paediatric age group. We firmly believe that the use of quinolones in childhood should be restricted to severe, life threatening illnesses where alternative therapy is either not possible or feasible. Our audit with the abysmal results of follow-up, strongly supports our contention that ciprofloxacin and other quinolone use in children should be restricted to hospitals and strict therapeutic and follow-up guidelines enforced.

It is incorrect to equate Nalidixic Acid, a first generation quinolone, with other newer agents which may have entirely different pharmacokinetics and toxicity¹. Notwithstanding the apparent lack of cartilage toxicity on MRI scanning, many of the changes may be subtle and only apparent after longterm follow-up. Irrespective of several retrospective reviews of quinolone toxicity, these agents are still not registered for routine use in the paediatric age group in the West, as strict growth and follow-up criteria need to be followed. The longest follow-up reported from India on longitudinal studies to date, is only 2 years and although there is no significant growth stunting, the investigators themselves request caution in interpreting any lack of potential toxicity². It is also interesting to note recent data on fluoride accumulation in the body with fluoroquinolone use in children, another potential source of bone toxicity². Fluoroquinolones are also not as innocuous as the manufacturers would make out, as a high rate (upto 1.3%) of arthralgias in children has been reported in the literature^{3,4}, along with dental staining in neonates⁵, as well as interstitial nephritis⁶.

The most important lesson from our audit at a teaching hospital with major communication resources, was that the overall voluntary follow-up rate was extremely low. We have thus major problems with widespread use of quinolones, such as ciprofloxacin, in children, in situations where stringent criteria for follow up are not maintained. It is important here to note that some workers from India using the doctrine of compassionate use in sick children, have reported ciprofloxacin therapeutic data in ‘children with only a three month follow-up, and no growth information’⁷. We and others⁸⁻¹⁰. would therefore, take the cautious route of waiting for further experience and follow-up with these agents. The use of ciprofloxacin should therefore, continue to be restricted to supervised hospital use in children as the last resort agent, when there is no alternative. Additionally, where physicians have rushed into indiscriminate prescribing of these agents, the result has also been a remarkably rapid emergence of drug resistance^{11,12}.

We thank Dr. Essa for his interest in our article and look forward to his continued support in encouraging rational therapeutics in children.

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