

again stresses the importance of clinical examination of the genitalia and early identification of clitoromegaly which seems to be the pragmatic approach to pre-screen for CAH in our setting.

In summary, there is a need for more studies from different parts of India on clitoral length and anogenital distance. Neonatologists and Pediatric endocrinologists should be aware of local and regional references before subjecting the patients to detailed hormonal evaluation in otherwise asymptomatic newborns with suspected genital abnormalities.

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Why Antibiotic ‘Invisibility Day’ is Better than ‘Invisible Antibiotic’ Future?

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Antibiotics provided the *vis-a-tergo* to “modern medicine” almost a century ago. The discoverer of antibiotics, Sir Alexander Fleming, had warned about penicillin resistance in many of his lectures, including in his 1945 Nobel Prize lecture where he said “It is not difficult to make microbes resistant to penicillin in the laboratory by exposing them to concentrations not sufficient to kill them, and the same thing has occasionally happened in the body...there is the danger that the ignorant man may easily under-dose himself and by exposing his microbes to non-lethal quantities of the drug make them resistant.” What Fleming had envisioned did come true. It is estimated that for the seven major classes of known antibiotics, resistance has developed within a span of about one to four years from the time of clinical introduction of the drug [1].

Between 1983 and 1987, Food and Drug Administration (FDA) approved 16 new systemic antibiotics, but since then antibiotic approvals have been on the decline. Since 2008, only two systemic antibiotics have been approved [2]. As time went on and the idea of

antimicrobial resistance still had not caught on with mainstream medicine, the drying pipeline of antimicrobial agents along with increasing resistance got the Infectious Disease Society of America (IDSA) up in arms. The IDSA set forth their “Bad Bugs, No Drugs” campaign in 2004 [3]. Along with a series of papers, the IDSA and Society of Healthcare Epidemiology of America (SHEA) came out with the current antimicrobial stewardship guidelines that were published in 2007[4].

Antibiotics continue to save lives every day. This ability to control infection is critical to other advances in medicine be it neonatal care, organ transplantation, chemotherapy for malignancy, immunosuppression, safe surgery and obstetric care or intensive care interventions. But sadly antibiotic resistance has now become a major public health crisis. It is a common scenario to have a very sick patient with infection and the laboratory reports listing every single drug as resistant. The greater the volume of antibiotics used, the greater the chances that antibiotic-resistant populations of bacteria will prevail in the contest for survival of the fittest at the bacterial level.

An effective antimicrobial stewardship program will limit inappropriate and excessive antimicrobial use but more importantly, will improve and optimize therapy and clinical outcomes for the individual affected patient. The broad interventions of antibiotic stewardship includes antibiotic 'time out' prompting a reassessment of the continuing need and choice of antibiotics after initial empirical therapy, prior authorization, and lastly prospective audit and feedback. Some facilities restrict the use of certain antibiotics based on the spectrum of activity, cost, or associated toxicities to ensure the use is reviewed with an antibiotic expert. There is sufficient scientific evidence to support improvement in clinical outcome as a consequence of antibiotic stewardship program; the measures include curtailing the antibiotic abuse [5], decreased antimicrobial consumption [6], strict antibiotic usage guidelines [6,7], reduced length of hospital stay [8], improved ventilator-acquired pneumonia outcomes [9], and better patient outcomes with infection [5].

Antibiotics are the only drugs where use in one patient can impact the effectiveness in another. They are a shared resource and now becoming a scarce resource. Using antibiotics properly is analogous to developing and maintaining good roads. Practicing antibiotic invisibility days, rounds, operations, ICUs with or without justification forms, may preempt invisible antibiotic usage, in future, in our country. In resource-poor or deprived settings of rural healthcare, where no data exists or only sketchy utilization registers exist as well as in metropolises with swanky corporate health care settings, optimizing antibiotics by measures such as "justification for restricted usage antibiotics" and rational use of antimicrobials would tilt the balance in favour of the system in the ongoing war against deadly bugs.

In the current issue of Indian Pediatrics, Bhullar, *et al.* [10] have highlighted one such well-established method of calling to attention the indiscriminate use of antibiotics in intensive care units and its impact on the same. The study shows that implementation of an antibiotic justification form for restricted antibiotics and follow-up of the same is associated with a marked reduction in antibiotic consumption, and with acceptably appropriate use of the drugs under restricted use. This could be under

the purview of the quality improvement initiatives undertaken by the hospital administration or as part of a departmental research activity. We need multifaceted approach to make the deadly bugs disappear before our antibiotics are pushed into oblivion.

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