Responding to the Global Guidelines for the Prevention of Surgical Site Infection, 2018: A focus on surgical antibiotic prophylaxis prolongation

Sir,

Recently, the Global Guidelines for the Prevention of Surgical Site Infection (SSI) has been updated and released. There are no differences between the first edition (2016) of the guideline and the second edition (2018) pertaining to the antibiotic prophylaxis timing, selection, and the continuation beyond the requirement. As both guidelines, the WHO recommends against the prolongation of surgical antibiotic prophylaxis administration for preventing the SSI after completion of any type of operation. As per the antimicrobial resistance (AMR) guideline 2016 of India, it was emphasized only on single-dose antibiotic prophylaxis preoperatively. A review also commented on single-dose administration and also on the appropriate timing of the administration of antibiotic. The two guidelines were designed and recommended safely keeping in mind regarding the AMR that is prevalent globally. This updated guideline will definitely guide countries like India to draft or retain the current guidelines as per the local needs, drug policies, and status of implementation of the antibiotic stewardship in their respective countries. The guideline also emphasized on the awareness to the staff involved or handling as it is also going to be the main component in resistance, thereby helping in the prevention of SSI.

The health professionals dealing with antibiotic prophylaxis in the surgery should be more focused on the antibiotic selection and the optimal timing it has to be administered. Since the guideline goes against the usage of antibiotic after 24 h of completion of surgery, this should be followed in strict so that unnecessary burden to the patient is reduced in aspect of resistance development for him/her or cross-resistance with the other needy patients.

SUMMARY OF ANTIMICROBIAL RESISTANCE GUIDELINE OF INDIA AS SURGICAL PROPHYLAXIS VERSUS GLOBAL UPDATED GUIDELINE

The antibiotic should be administered within 60 min before the surgical incision as compared to the WHO Global Guideline of 120 min. Both the local and the WHO emphasize on single dose. The second intraoperative dose is planned in prolong surgery based on the choice of antibiotic used for prophylaxis based on the half-life of the drugs. Both guideline and AMR stress on the prophylaxis of the antibiotic should not be given beyond surgery duration, with few exceptions for cardiothoracic surgery up to 48 h permissible in the Indian scenario as compared to >24 h as mentioned in the global guideline for cardiac orthognathic and vascular surgery. Choice of the prophylaxis should be based on the local antibiogram as emphasized in general. The common antibiotics used as prophylaxis are cefazolin, cefuroxime, ceftriaxone, cefoperazone sulbactam, piperacillin, and tazobactam in the Indian scenario based on the type of surgery.

In conclusion, the guideline should be focused and be read vigilantly in developing countries to prevent death due to SSI and the development of microbial resistance.

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There are no conflicts of interest.

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