

## Perioperative antibiotics administration: Who will take the onus?

Dear Editor,

Anesthesiologists and Surgeons share responsibility for patient's safety in perioperative period. According to the World Health Organisation (WHO), surgical safety checklist, the operating team needs to check whether antibiotic prophylaxis has been given within 60 minutes of skin incision. However, the compliance to surgical antibiotic prophylaxis remains low and administration of preoperative antibiotic appropriately is thwarted by many obstacles.<sup>[1]</sup> We believe this low compliance is partly because the person responsible for antibiotic administration is not designated. We wish to highlight this aspect of clinical care which is still unresolved and in which the clinical guidelines are not routinely followed, especially in our part of the world.<sup>[2]</sup>

It has been shown that both surgeons and anesthesiologists consider administration of antibiotic as a low priority task in the operating room and many are even unaware of the existence of guidelines.<sup>[3]</sup> In many places, the test dose is administered preoperatively by the surgical team and the prophylaxis dose is administered inside operation theatre (OT) by the anesthesiologist after induction of anesthesia. The disadvantage of this approach is that it becomes difficult to achieve maximum concentrations of antibiotics at the time of incision (as recommended) because antibiotics are administered only after induction of anesthesia. Also, in case of patient having a drug reaction, it becomes difficult to ascertain whether the reaction is caused by the antibiotics or the anesthetic drugs.

The other usually followed approach consists of administering antibiotics prior to shifting them inside OT. However, monitoring of these patients for drug reactions during shifting can be difficult. This prevents many physicians from administering antibiotics prior to shifting to OT.

Both these scenarios create a sense of tension between both prior to surgery as to who takes responsibility for timely antibiotic administration and for anaphylactic reaction if occurs.<sup>[4]</sup> Even much more stress is created for the anesthesiologist at those places where even test dose is not given in preoperative area and responsibility is put on their shoulders for timely administration before start of surgery.

Lack of protocol to be followed and ineffective communication is also one of the reason for untimely antibiotic administration. This communication lapse could be between the surgeon and perioperative staff or between the nurse in surgical day care to the OR nurse and anesthetist.

Therefore, clear cut guidelines should be made which can mention the responsibility of the specialist dedicated for this job. In the absence of such guidelines, both the anesthesiologist

and surgeon would continue to shirk from administering surgical antibiotic prophylaxis and passing the buck to the other. The gap between evidence-based guidelines and practice is populated by various obstacles that exist at multiple levels—institutional, healthcare team, and individual, which must be addressed in order to achieve optimal practice.

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