CORR Insights

CORR Insights®: What are the Patterns of Prophylactic Postoperative Oral Antibiotic Use After Foot and Ankle Surgery?

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Where Are We Now?

Peroperative antibiotic type, timing, and duration in the hospital setting are monitored and recorded as part of the Physician Reported Quality Measures, as well as linked to physician reimbursement for

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orthopaedic procedures. Foot and ankle surgery offers a unique set of issues when considering the assessment and usage of antibiotics. As this paper has reviewed, there is a higher reported surgical infection rate linked to this anatomic area with continued colonization of bacteria after surgical preparation suggesting increased infection risk. Yet, foot and ankle outpatient surgery makes tracking antibiotic patterns difficult; as such, this area of orthopaedics is prone to antibiotic monitoring practices that fly under the radar. The current study assesses the current trends for oral antibiotics postoperatively in outpatient foot and ankle surgery. The variation in antibiotic prescriptions was extensive. This included variations both in the classes of antibiotics used and duration of these postopera-

tive courses. The serious concern about using antibiotics resulting in the production of more virulent organisms or development of resistant strains of bacteria to current antibiotics by this routine practice is worrisome.

Where Do We Need To Go?

This survey paper highlights the variation in surgeon decision making for the type and duration of postoperative antibiotic use in outpatient foot and ankle surgery. It also does an excellent job reviewing the literature on the topic of surgical site infection rates in foot and ankle surgery. Lastly, the authors provided a comprehensive list of the weakness of this study to allow the reader to interpret the results fairly. One major weakness listed was the recall bias of the surgeon to his/her surgical infection rate, and how the use of postoperative antibiotics may or may not influence this complication.

The study design of this paper assumes that all surgeons have a similar patient populations from which the data are reported. A “next step” would

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be to reissue another survey in which standardized patients are described from which similar questions about the need for post-operative antibiotics (type and duration) could be gathered.

How Do We Get There?

A prospective observational cohort study is desirable in order to determine

the surgical site infection rate, as well as the need for postoperative antibiotics in foot and ankle surgery. This type of study design could be used to collect prospective data and assess if postoperative antibiotics (prescribed or not) had any influence on surgical site infection rates. As healthcare and electronic medical record monitoring advances into the outpatient setting, it is a logical next step for governmental payers to apply the inpatient hospital

quality indicators to the outpatient setting. This paper raises the question about surgeon variation in postoperative antibiotic coverage to a unique specialty of orthopaedic surgery. It is important to know if antibiotics are needed to decrease infection rates and increase quality of care for patients. If they are not needed, I believe we should forgo the cost of antibiotics and save money for the health care system.