

POSTOPERATIVE SPINAL INFECTIONS

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One hundred and five patients had surgical spine operations. Nine patients who had wound infections were studied microbiologically. Among nine patients, K (+) staphylococcus were isolated in four cases, Klebsiella in two cases, E. coli in one case. In two cases no growth were seen.

The postoperative wound infection after spine surgery was seen 8.5% and we noticed that coagulase (+) staphylococcus was the most common pathogen.

Key Words: Wound Infections, Spinal Surgery

INTRODUCTION

Every operations in surgery is an experiment in bacteriology.

Infections in spinal operations can be divided into two categories: wound and disc space (1).

Postoperative spinal wound infections may present early or late in the postoperative period. Postoperative fever, swollen wound, erythema and with or without drainage present postoperative wound infection (1).

In this study we investigated infection rate and pathogen agents of postoperative spinal infections.

MATERIAL AND METHOD

Nine patients had wound infections among one hundred and five spinal surgeries at Ankara Numune Hospital Department of Orthopaedics and Traumatology 1. All the nine patients who had wound infections were cases of vertebral burst fractures and all of them had posterior Alici Spinal Instrumentation. All the nine patients had taken prophylactic antibiotics postoperatively.

Blood and EMB agar are used for the all cultures, gram stain and biochemical tests are done in order to investigate the bacteries. We found out coagulase enzyme as coagulase is used as a marker for virulance for S.aureus (2).

RESULTS

After the examination of the wound cultures of the nine patients, we found these results; K(+) staphylococcus in 4 cases, Klebsiella in 2 cases, E.coli in one case. In two cases no growth were seen.

DISCUSSION

The incidence of postoperative spinal wound infections ranges from the 3% to 10% (1, 3). The diagnosis of the spinal deformity was related to the infection rate. The use of prophylactic antibiotics has been shown to reduce the infection rate (1).

The most common organism cultured from wound infections is S. aureus. With the use of prophylactic antibiotics, the incidence of gram- negative infections increased (1).

In our study postoperative spinal infection rate was seen 8.5% and S.aureus was the most common pathogen agent.

The criteria for reducing the incidence of infection are rigid restriction of movement in the operating room, careful thorough preparation of the patient and the operating room staff, gentle handling of tissue, and an awareness on the part of everyone in the hospital of the problem of infection (4).

REFERENCES:

1. Lonstein, J.E.: Diagnosis and Treatment of Postoperative Spinal Infections. Surg. Rounds Orthop., 25, Oct. 1989.
2. Murray, R.P.: Staphylococcus and Enterobacteriaceae In: Medical Microbiology, Mosby, London 1994.
3. Transfeld E.E., Lonstein J.E., et al: Wound Infections in Elective Reconstructive Spinal Surgery. Orthop. Trans. 9: 128, 1985.
4. Nelson C.L.: Prevention of Infection In: Surgery of the musculoskeletal System, Evarts (Ed). Second Edition, Churchill Livingstone, New York 1990.

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