Nosocomial central nervous system infections constitute 0.4% of all nosocomial infections. The responsible pathogens of nosocomial meningitis are quite different from community-acquired meningitis with high rates of morbidity and mortality. The most important prognostic factor is the appropriate choice of pathogen-specific antibacterial therapy. In this report, a 64 years old woman with nosocomial meningitis caused by Klebsiella pneumoniae and Acinetobacter spp. after lumbar disc hernia operation, has been presented. The risk factors were detected as recent history of neurosurgical operation for three times and long term (29 days) use of external ventricular drainaige (EVD) catheter. Empirical meropenem (3 x 2 g, IV) and vancomycin (2 x 1 g, IV) therapy was initiated upon the diagnosis of nosocomial meningitis based on the clinical and laboratory findings on the postoperative fifth day. Extended-spectrum beta-lactamase (ESBL) producing K. pneumoniae (susceptible to amikacin, imipenem, meropenem, cefoxitine, ciprofloxacin, piperasillin-tazobactam and trimethoprim/sulfamethoxazole) was recovered from cerebrospinal fluid (CSF) and blood samples obtained on the same day. There was no change in the status of the patient on the eighth day of meropenem therapy, with high leukocyte number (1300/mm3) and presence of gram-negative bacilli in CSF, and ESBL positive K. pneumoniae (antibiotic susceptibility pattern same with the previous isolate) growth in CSF culture. Thereupon intravenous ciprofloxacin (3 x 400 mg) was added to the therapy and her EVD has been changed. However, ESBL positive K. pneumoniae (antibiotic susceptibility pattern same with the previous isolate) together with Acinetobacter spp. (susceptible to gentamycin, tobramycin, netilmicin, ciprofloxacin, levofloxacin and cefepime) were isolated from CSF and blood cultures obtained on the 13th day of meropenem and fifth day of ciprofloxacin therapy. Therefore intraventricular and intravenous gentamicin (15 mg/days and 3 x 120 mg, respectively) were added to the therapy. The patient recovered at the end of three weeks treatment without any additional sequela other than her primary illness. This case was the first case of nosocomial meningitis due to ESBL positive K. pneumoniae together with Acinetobacter spp. in the available literature [1)].

1)
Oztoprak N, Celebi G, Baruönü F, Kalayci M. [Nosocomial meningitis with dual agents and treatment with intraventricular gentamicin]. Mikrobiyol Bul. 2008 Jul;42(3):497-501. Turkish. PubMed PMID: 18822895.