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BENJAPORN SILARUG : DRUG USE EVALUATION PROGRAM FOR
CEFTRIAXONE THERAPY AT SENA HOSPITAL, AYUTTHAYA. THESIS
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Drug Use Evaluation (DUE) program for ceftriaxone therapy was performed at Sena Hospital. The aims of this study were to develop a DUE program for ceftriaxone therapy and to evaluate the effectiveness of this program. Data were collected retrospectively for pre-intervention period (July 1 to September 30, 1993) and concurrently for post-intervention period (February 15 to May 15, 1994). The intervention was the restricted policy for ceftriaxone use developed by the Pharmacy and Therapeutic Committee (PTC).

There were 33 patients during the pre-intervention period and 27 patients during the post-intervention period. Age and payment mechanism of the patients were similar between pre- and post-intervention. After implementing the restrict policy, the inappropriate use of ceftriaxone was significantly decreased from 72.7% to 3.7% ($p < 0.05$). Ceftriaxone usage was decreased in prophylactic use (36.4% to 22.2%), while ceftriaxone usage was increased in the treatment of empiric use (18.2% to 33.3%). The number of patients who received ceftriaxone for therapeutic use in post-intervention was the same as in the pre-intervention period. Patients in the post-intervention period had higher average dose per case (15 gm versus 8 gm) and longer average length of stay (26.6 days versus 13.6 days) than in the pre-intervention period. The reasons for inappropriate use were that dosage interval was shorter than the criteria (51.5%) and alternative drugs were available (21.2%). Consequently, there was cost avoidance of 41,700 bahts.

A DUE program for ceftriaxone therapy imposed by the PTC was effective in increasing the appropriateness of ceftriaxone use as well as avoiding unnecessary cost. However, the DUE program should be implemented continuously and should be expanded to cover other antimicrobials as well.