TOTAL HIP REPLACEMENT AND RELATED DIAGNOSIS RELATED GROUPS (DRG's) IN THE GREEK HEALTHCARE SYSTEM

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ABSTRACT

Aim. To evaluate the Greek Diagnosis Related Groups(DRG's)system in regard to the procedure of total hip arthroplasty. **Methods**. In a tertiary university orthopedics department implementing clinical protocols we recruited 75 consecutive patients planned to undergototal hip arthroplasty. Indicators of quality and performance were rates of mortality, pulmonary embolism, trauma dehiscence, disarticulation and readmission. **Results**. All rates of performance were excellent and equal to zero. The mean length of stay was almost identical to the one predicted by the Greek DRG's. **Conclusions**. Clinical protocols are connected with good clinical results. The predicted by the Greek DRG's hospital length of stay for total hip arthroplasty lies within pragmatic limits.

INTRODUCTION

Diagnosis Related Groups (DRG's) consist one of the internationally most popular systems used for the standardization and billing of medical and surgical diagnoses and the related diagnostic and therapeutic procedures. The system categorizes medical diagnoses and proposes an indicative hospital length of stay and a related budget, which must be paid to the hospital by the Healthcare System, the patients insurance or the patients themselves, according to the Health System of each country. Initially planned and applied in the United States, the system has been adopted by various health systems, including the ones in Germany, France, Australia and Greece [1,2,3]. The DRG's are believed to have rationalized the healthcare expenses in many countries. Despite that, many specialists criticize the system because they believe it tends to underestimate the costs, or, on the other hand, that it is being misused by hospitals and health institutions, which try to inflate the possible diagnoses of a patient in order to achieve greater profits.

Clinical protocols are an expression of evidence based medicine and consist clinical pathways or guidelines, planned to offer the best possible treatment at the least possible cost[4,5,6,7,8]. These protocols are often used by medical departments that really struggle to improve their results and offer the best possible services to their patients. As a form of standardization of medical procedures they can be related to the DRG's, as both aim at the improvement of health services.

In the current study we evaluate the Greek DRG's[2] regarding one of the most common orthopedic procedures, total hip replacement. In addition, the influence of the implementation of clinical protocols on the quality of health services is also investigated.

METHODS

In a university orthopedics department implementing clinical protocols [9] we recruited 75 consecutive patients planned to undergo total hip replacement. Clinical indicators used to control the quality of the procedure were mortality, length of hospital stay, frequency of pulmonary embolism,rate of readmission, rate of trauma dehiscence, rate of disarticulation.

RESULTS

A total of 75 patients were admitted in the study, 47 of which were male(62,66%). Mean age was 65,84±6,31 years. No patients deceased. There were no cases of pulmonary embolism among the study patients, no cases of trauma dehiscence, no cases of disarticulation and no cases of readmission. Mean length of stay was 7.17±0.16 days. These results are depicted in detail on Table 1.

Table 1. Data of patients submitted to total hip replacement

Number of patients	75
Gender (Men)	47 (62,66%)
Age	65,84±6,31
Mortality	0%
Rate of pulmonary embolism	0%
Rate of readmission	0%

Surgical trauma dehiscence	0%
Rate of disarticulation	0%
Length of stay	7,17±0,16

DISCUSSION– CONCLUSIONS

The patients of our sample were operated according to clinical protocols aiming at high quality medical services. The results were outstanding, as all indicators of quality performance including rates of mortality, pulmonary embolism, disarticulation, trauma dehiscence and readmission were equal to zero. These results corresponded to a mean duration of hospital stay of 7.17 days, almost identical to the one of 7 days proposed by the related Greek DRG's for cases of hip replacement without complications. The corresponding budget proposed is 3,000 Euros. The related figures for cases with severe complications proposed by the DRG's are 15 days and 4,000Euros respectively.

The main conclusion drawn by these results is that the implementation of clinical protocolsis connected with outstanding clinical results and that the evaluation of the Greek DRG's related to total hip arthroplasty proved that the predicted hospital length of stay is within logical and pragmatic limits.

We believe that such an evaluation of national DRG's is absolutely essential from time to time, as it is an act that will ensure the proper function of the system in the long term.

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