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ORIGINAL ARTICLE

Analysis of Operating Room Activities in the Dermatology Department at Hospital Universitario de Fuenlabrada (2005-2010)☆

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KEYWORDS
Surgery;
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Abstract
Objective: To analyze data corresponding to patients who underwent dermatological surgery in an operating room.
Material and methods: This was a descriptive, retrospective study of operating room activities in the dermatology department of Hospital Universitario de Fuenlabrada in Madrid between January 2005 and December 2010. We analyzed the relative frequency of a range of patient and procedure-related variables, as well as substitution and cancellation rates, the proportional risk of complications, and operating room efficiency.
Results: In the period analyzed, 11 516 patients underwent surgery: 9351 required minor surgery, 1998 major ambulatory surgery, and 167 surgery requiring hospitalization. Simple excision was the most common procedure (64.7%), and in the majority of cases (85%), the condition was benign. The mean number of patients treated per day was 9.7, and mean operating room efficiency was 71.9%.
Conclusions: Accurate record-keeping is essential for analyzing operating room activities and comparing results with those from other centers. The analysis of patterns over time shows the effect of changes made on different indicators. In our case, a decrease in operating room efficiency was seen with an increase in the number of patients per day undergoing surgery.

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PALABRAS CLAVE
Cirugía;
Dermatología;
Cirugía mayor ambulatoria;
Indicadores;
Rendimiento

Análisis de la actividad quirúrgica realizada en el Servicio de Dermatología del Hospital Universitario de Fuenlabrada (2005-2010)

Resumen
Objetivo: Analizar los datos de pacientes sometidos a cirugía dermatológica en quirófano.
Material y método: Estudio descriptivo, retrospectivo, de la actividad quirúrgica programada realizada en quirófano en el Servicio de Dermatología del Hospital Universitario de Fuenlabrada desde enero de 2005 a diciembre de 2010. Se analizan distintas variables relativas al paciente y a la cirugía. La medición de las variables se realiza mediante frecuencias relativas. Se estudian los índices de sustitución y de suspensión, el riesgo proporcional de complicaciones y el rendimiento quirúrgico.
Resultados: Durante el periodo de estudio fueron intervenidos 11.516 pacientes, 9.351 en la modalidad de cirugía menor, 1.998 mediante CMA y 167 precisaron cirugía con hospitalización. La patología tratada fue en su gran mayoría de naturaleza benigna (85%) y la escisión simple el procedimiento más realizado (64.7%). El número medio de pacientes/jornada fue de 9.7. El rendimiento quirúrgico medio fue del 71.9%.
Conclusiones: El registro adecuado es fundamental para conocer la actividad realizada y poder comparar con otros centros. El análisis evolutivo de los datos registrados permite observar el efecto que las medidas adoptadas tienen sobre los distintos indicadores. En nuestro caso el rendimiento del quirófano en porcentaje de ocupación disminuye al aumentar el número de pacientes intervenidos por jornada.

Introduction

A large proportion of routine clinical practice in dermatology involves surgery. The incidences of both melanoma and nonmelanoma skin cancers have risen in recent decades and are expected to continue to do so in the coming years.[1] Malignant and premalignant skin lesions are the third most frequent reason for consulting a dermatologist in Spain, and this type of consultation is expected to become even more common as the population ages. Skin cancer is usually treated surgically,[2] as are many of the benign tumors we see routinely. The scope of dermatologic surgery, therefore, is considerable. Meanwhile, patients appreciate continuity of care, evaluating positively a process in which the dermatologist diagnoses a skin lesion, chooses and performs the procedure to treat it, and then follows the patient's progress afterwards.[3]

Although most dermatologic surgical procedures are carried out on an outpatient basis under local anesthesia, the services of an anesthesiologist are sometimes required because of patient characteristics or surgical complexity. In such cases the procedure may be scheduled as major ambulatory surgery (MAS) or the patient may have to be admitted to hospital for postoperative observation.

Adequate record-keeping on all surgical procedures is necessary if we are to understand our practice and manage human and material resources appropriately. The operating room occupancy rate (percentage of available time the space is occupied by patients) is the indicator usually used to reflect operational efficiency, as it allows a surgical department to plan the number of patients it can handle in a given period.[4] This statistic is calculated on the basis of data collected, and serves only as a reflection of the time the space was in use, without distinguishing uses and without considering how long procedures should take in accordance with their complexity.

The aim of this study was to analyze data for patients undergoing dermatologic surgery in our operating rooms. By following several indexes over time, we will be better able to plan measures to improve efficiency and quality of care in dermatologic surgery.

Materials and Methods

This was a descriptive, retrospective study of surgical procedures performed by dermatologists in operating rooms at Hospital Universitario de Fuenlabrada between January 2005 and December 2010. After a dermatologist had made a clinical diagnosis and prescribed surgical treatment, the patient was placed on a wait list. The procedure was then allocated a place in the operating room schedule. Cases were classified according to patient characteristics (age, concurrent diseases) and expected complexity of the procedure according to the Davis criteria (with large lesions, long duration of surgery, or need for sedation or general anesthesia indicating complexity). Grade 1 procedures (interventions under a local anesthetic and requiring no special postoperative care) were classified as minor surgery. Procedures classified as grades 2 and 3 were scheduled as MAS or surgery with planned admission. Grade 2 interventions were those performed under local, regional or general anesthesia or sedation, requiring specific but nonintensive postoperative care that was not of long duration; oral analgesics were available if needed. Grade 3 surgeries were those that required longer postoperative care in the hospital. According to hospital policy, patients under the age of 14 years undergoing any type of surgery were managed under the MAS regimen so that anesthesia could be adequately monitored. MAS procedures with complications that