Attachment III

Evidence-based model for cost-effective provision of anesthesia care in resource-limited health economies

Background

Uruguay is near to start its National Liver Transplant Program. As it has limited economic resources, the cost-effective relation in every therapeutic and test evaluation is a main point for the success of the program. Provide anesthesia safe care with a multidisciplinary approach, ensuring world acceptable morbidity and mortality rates with our technological and economical resources is one of our challenges.
The main objective of this research is to develop a model of anesthesia perioperative care provision for liver transplant teams that provides preoperative evaluation, intra operative care and monitoring, with the lowest cost economical and international accepted efficacy.

Aims:

1. Establish the best cost-effective relation for:
    a. Preoperative evaluation.
    b. Intra operative monitoring equipment.
    c. Anesthesia technique and pharmacologic protocols for liver transplant.
2. Establish the personnel requirements during the surgery and define their "roles"

Methods:

The review of the literature will include:

- MEDLINE and other database searching for studies about morbidity, mortality, costs, economic evaluations, resources utilization, efficiency and requirements in liver transplant.
- National resource utilization registry data from different countries: UK, Spain, USA, Argentina, Uruguay.
- Anesthesia Protocols and Patient selection Protocols from the three institutions that will support my proposal and from Hospital Italiano in Buenos Aires.

Review of the current standards for practice and resource utilization for liver transplant assessed and defined by international organizations as ILTS, LICAGE and LTrAC.
Analysis of personnel requirements and their functions during the surgery in the operating room in the three hospitals: Clinic University Hospital, Cambridge UK Hospital and UCSF.
Analyze the cost of acquisition of needed equipment for Liver Transplant in South America.
Evidence based analysis of cost-effective relation for the issues defined in the aims: 3, 4 and 5.
Define the minimal rates of morbidity and mortality that we will accept as successful in our program.
Estimate the costs of the proposed anesthesia care model in Uruguay.

Results:

The results of our investigation will provide evidence to assess a **documented proposal of safe anesthesia care with a multidisciplinary approach, for resource-limited health economies.** This proposal will be used in Uruguayan Liver Transplantation Program to optimize resources and improve outcomes.