FERRAMENTAS SPA
BIBLIOTECA CLÍNICA

Conselhos da Sociedade Portuguesa de Anestesiologia

PERIOPERATIVE MEDICINE

PORTO 2017

SPA
Sociedade Portuguesa
de Anestesiologia

PERIOPERATIVE MEDICINE IN PORTUGAL

NATIONAL VILLAGE

PERIOPERATIVE MEDICINE COMMITTEE – SPA

1. DEFINITION

- Perioperative model of care in which anaesthesiologists act as primary physicians

2. ORGANIZATION

- In our country Perioperative Medicine is neither recognized nor certified as distinct speciality of anaesthesia, surgery or intensive care. In SPA law it is considered as an area of Anaesthesiology

3. FINANCING

- No funding for Perioperative Medicine in Portugal, each patient with each type of surgery with a predefinied length of stay represents an amount of money financing the hospital

6. QUALITY

- The SPA developed an organizational survey of Perioperative Medicine at national level with 4 thematic areas: **production**, **structures**, **processes** and **outcomes** (2016)

7. TRAINING

- The residency training program does not have a specific teaching module in Perioperative Medicine. It is taught in each valency from the preoperative preparation to the recovery of the patient and during intensive care intership. We have Perioperative Medicine modules in Post-graduate Courses/Continuing Medical Education.

8. CHALLENGES

- Evolving from anesthesia safety to perioperative safety, focus in outcomes. Systematic identification and follow-up of the high-risk patient. Collect data on perioperative indicators (processes and outcomes), notification of incidents and medication adverse reactions.

4. MODEL OF CARE

- There is no model of Perioperative Medicine published by the Portuguese Anaesthesiology Society (SPA).
- The current most frequent model of organization of Perioperative Medicine, in our country, is a **patient-centered model**, based on a multidisciplinary team, supplying an integrated process of care since the patient is proposed for surgery until its recovery. In this model the anaesthesiologist acts as the primary care physician working in team with the intensivist, the surgeon, the nurse and others. We have some Enhanced Recovery Programms (ERAS) in the field of Orthopedics Surgery, Obesity Bariatric Surgery, Breast Surgery and Colo-Rectal Surgery.

PRE-OPERATIVE

SURGICAL PROPOSAL → ANAESTHESIOLOGY CLINIC/ VISITATION

- **Optimization medical conditions/ medication**
- **Risk stratification, airway**
- **ICU admission criteria**
- **Standardized evidence-based protocols**
- **Individualized Perioperative Care Plan**
- **Informed consent**

INTRA-OPERATIVE

REDUCE CANCELLATIONS/DELAYS

- **Anaesthesia to achieve better outcomes**
- **Monitoring criteria**
- **Antibiotic/Thromboembolism prophylaxis**
- **Post-operative care plan register**
- **Inpatient electronic health record to communicate postoperative phase**

POSTOPERATIVE

POST-OPERATIVE DESTINATION CRITERIA (HIGH RISK PATIENT)

- **Multidisciplinary Team Work (Anaesthesiologist, Surgeon, Nurse, etc...)**
- **Follow-up of the patient (high risk in particular)**
- **Acute Pain Unit**
- **Chronic Pain Unit**

5. RECOMMENDATIONS

- PERIOPERATIVE MANAGEMENT OF PATIENTS GIVEN ANTICOAGULANTS AND ANTIPLATELET AGENTS (2014) – APPROVED BY 5 NATIONAL SCIENTIFIC SOCIETIES.
- PERIOPERATIVE RECOMMENDATIONS FOR PROPHYLAXIS OF VENOUS THROMBOEMBOLISM IN ADULT PATIENTS – NATIONAL MULTIDISCIPLINARY CONSENSUS (2014) - APPROVED BY 12 NATIONAL SCIENTIFIC SOCIETIES
- CONSENSUS IN CLINICAL MANAGEMENT OF THE AIRWAY IN ANESTHESIOLOGY (2015)
- PERIOPERATIVE PATIENT BLOOD MANAGEMENT (2015).
- NATIONAL MULTIDISCIPLINARY CONSENSUS OF PERIOPERATIVE MEDICINE IN OBESITY SURGERY (2016).
- CONSENSUS ON MAINTENANCE OF NORMOTERMIA IN THE PERIOPERATIVE PERIOD (2017).
- ANESTHESIA IN THE ELDERLY OUTPATIENT (2017)
- ANESTHESIA IN THE OBESE OUTPATIENT (2017)

9. ESA PROPOSAL

- We would like the ESA to propose a model for development/organization of Perioperative Medicine.

10. SUGGESTIONS

- Create an european system model for the collection of perioperative data (structures, processes, outcomes, indirect outcomes) according to European Perioperative Clinical Outcome definition.
- Make Perioperative Medicine an explicit part of curriculum.

PERIOPERATIVE MEDICINE PHOTO PORTUGAL – 2015

SPA - PERIOPERATIVE MEDICINE COMMITTEE
AUTHORS: CRISTINA AMARAL, MAGNA FORTUNATO, ALICE SANTOS, JOANA MOURÃO

OBJECTIVES

To quantify Perioperative Medicine in Portugal, including production of consultations and anesthesia and identification of some of the structures and measures of processes and outcomes of the National Health Service (NHS).

MATERIALS AND METHODS

Organizational survey with 4 thematic areas: **production**, **structures**, **processes** and **outcomes**. Sent by email (docs.google.com) to the Anesthesiology Departments of 45 units (N=50) of the NHS (Not included were 2 military hospitals, 1 ambulatory ophthalmology hospital and 2 public/private partnerships). Data Analysis: docs.google.com and Statistical Package for the Social Sciences. Preparation and testing phase - October / December 2015.

Target population – adult inpatients undergoing elective or emergency surgery in the Public Units of the NHS.

RESULTS AND DISCUSSION

Replies 29 (N: 45): Including all central university (6) and oncological (3) hospitals. Representative sample, high acceptability (64%)

1. PRODUCTION

1.1. PRE-OPERATIVE ANAESTHESIA CONSULTATION

- **145561 (43% of total scheduled surgery; Previous Census (2014): 55,66%)**

1.2 ANAESTHESIA

ANAESTHESIA (N=27)	NUMBER	%	% PREVIOUS CENSUS
SCHEDULED SURGERY/INPATIENT	109648	56.14	56.49
AMBULATORY SURGERY	140109	43.06	43.51
TOTAL SURGERY SCHEDULED	337637	84.04	82.80
URGENT SURGERY	61764	15.46	17.20
TOTAL SURGERIES	399631	100	100

TABLE 1: PRODUCTION DESCRIPTION ACCORDING TO TYPE OF SURGERY IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL WITH COMPARISON TO PREVIOUS CENSUS

ANAESTHESIA PRODUCTION ACCORDING TO SURGICAL SPECIALITY	NUMBER	RESPONDERS
- CARDIAC SURGERY	3804	4
THORACIC SURGERY	1506	7
- NEUROSURGERY	6759	12
CRANIECTOMY	865	2
- VASCULAR SURGERY	10087	10
MAJOR VASCULAR SURGERY	1869	3
- GENERAL SURGERY	68080	26
MAJOR GENERAL SURGERY	14224	11
- ORTHOPEDICS SURGERY	51658	26
MAJOR ORTHOPEDICS SURGERY	11179	9

TABLE 2: ANAESTHESIA PRODUCTION DESCRIPTION ACCORDING TO SURGICAL SPECIALITY IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL

2. STRUCTURES

2.1 NUMBER OF BEDS PER LEVEL OF CARE

Continental Portugal

- Acute Care Beds (n=27): 13870
- Critical Care Beds (level II and III) (n=26): 599
- Intermediate Care Beds (n=26): 505

Madeira Island

- Acute Care Beds (n=27): 722
- Critical Care Beds (level II and III) (n=26): 33
- Intermediate Care Beds (n=26): 9

COMPOSITE INDICATORS

- Beds of critics (Level II and III)/ Acute Care beds: 4,1%
- Ratio Level II and III/Level I: 1,2%

2.2 NUMBER OF ANAESTHESIOLOGISTS - TOTAL 1100

- Reduction of 21 anaesthesiologists comparing previous year

INSUFFICIENT ALLOCATION IN 27 NHS UNITS

2.3 INFORMATION CULTURE AND CARE MANAGEMENT

INFORMATION CULTURE AND CARE MANAGEMENT STRUCTURES	RESPONDERS	%
- MISSION AND OBJECTIVES IN PERIOPERATIVE MEDICINE	28	79
- CLINICAL AUDITS INVOLVING ANAESTHESIOLOGISTS	26	54
- PROFESSIONAL PERFORMANCE EVALUATION	27	33
- EFFICIENT COMMUNICATION/MEETINGS		
ANAESTHESIOLOGY SERVICE		69
OPERATING ROOM		61
PRE-OPERATIVE GROUP	28	39
FOLLOW-UP		25
WITH PATIENTS/FAMILY		32
PRIMARY CARE		21
- INPATIENT ELECTRONIC HEALTH RECORD		
ANAESTHESIA	29	52
PATIENT´S PROCESS		90
ACCESS PRIMARY CARE		60
- POST-ANAESTHESIA CARE UNIT	27	81
- FUNCTIONAL ACUTE PAIN UNIT	29	66

TABLE 3: INFORMATION CULTURE AND CARE MANAGEMENT STRUCTURES DESCRIPTION IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL

MONITORIZATION	RESPONDERS	RATIO MONITOR/OR
NEUROMUSCULAR MONITORING	26	0.90
TEMPERATURE MONITORING	15	0.50
ANAESTHESIA DEPTH MONITORING	26	0.89
CARDIAC OUTPUT MONITORING	27	0.63

TABLE 4: MONITORING STRUCTURES DESCRIPTION IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL (OR: OPERATING ROOM)

PERIOPERATIVE MEDICINE PHOTO PORTUGAL – 2015

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3. PROCESSES

- High risk patient triage to optimize individual outcome: 54% (n: 28)
- Anaesthesia record according to another risk evaluation model besides ASA: 36% (n: 28)
- Anaesthesia record with associated nutritional evaluation in high risk patients: 29% (n: 28)
- Unequivocal surgical patient identification: 93% (n: 28)
- Pharmacovigilance Policy (Drug Safety): 93% (n: 28)

PHARMOVIGILANCE POLICY	RESPONDERS	%
STORAGE STANDARDIZATION	28	96
DRUG DILUTION STANDARDIZATION	22	85
DRUGS LABELING AND PACKAGING WITH DIFFERENT COLOURS	23	89
RECORD AND NOTIFICATION OF ADVERSE REACTIONS	19	73

TABLE 1 PHARMACOVIGILANCE POLICY DISCRIMINATION IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL

- Incidents Notification Policy: 78% (n: 21)
- Incidents Notification in notific@ web portal: 43 % (n: 23)
- ENHANCED RECOVERY PROGRAMMES in application (n: 25)
  - Orthopedics - 3
  - General Surgery - 3

INSTITUTIONAL PRE-OPERATIVE CHECKLISTS	RESPONDERS	%
PRE-OPERATIVE COMPREHENSIVE SURGICAL CHECKLIST	28	100
PATIENT AUTONOMY ASSESSEMENT	19	95
PHYSIOLOGIC RISK ASSESSEMENT	15	75
PRESSURE ULCER AND FALL RISK EVALUATION	18	90
ANAESTHESIA MATERIAL AND DRUGS CHECKLIST	27	96
SURGICAL SAFETY CHECKLIST	28	100
OPERATING THEATRE ENVIROMENTAL CHECKLIST	21	75
CRISIS RESPONSE CHECKLIST	13	46

TABLE 2. DESCRIPTION OF THE DIFFERENT INSTITUTIONAL PRE-OPERATIVE CHECKLISTS IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL

INSTITUTIONAL PROTOCOLS/RECOMMENDATIONS	RESPONDERS	%
SURGICAL ANTIMICROBIAL PROPHYLAXIS	28	100
VENOUS THROMBOEMBOLISM PROPHYLAXIS	28	100
POST-OPERATIVE ANALGESIA	28	96
POST-OPERATIVE NAUSEA AND VOMITING PROPHYLAXIS	27	93
PERI-OPERATIVE MANAGEMENT OF ANTICOAGULANT, ANTI-PLATELET AGENTS PROTOCOLS	24	89
PERI-OPERATIVE BLOOD MANAGEMENT	24	86
PERI-OPERATIVE MANAGEMENT OF NEURAXIAL CATHETERS PROTOCOLS	25	86
PERI-OPERATIVE MANAGEMENT OF CARDIOVASCULAR THERAPY PROTOCOLS	16	57

TABLE 3. INSTITUTIONAL PROTOCOLS ACCORDING TO THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL

4. RESULTS

PROCESSES AND RESULTS INDICATORS IN THE PERIOPERATIVE MEDICINE SURVEY IN PORTUGAL

PHARMOVIGILANCE POLICY INDICATORS	NUMBER OF NOTIFICATIONS	NUMBER OF UNITS
DRUG ADVERSE REACTIONS NOTIFICATION	84	5
ADVERSE INCIDENTS NOTIFICATION	486	6

TABLE 4. PHARMACOVIGILANCE POLICY INDICATORS IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL .

PROCESSES AND RESULTS INDICATORS	UNIT RESPONDERS	%
SURGICAL SITE INFECTION	4	4.6
PERI-OPERATIVE MORTALITY AT 7 DAYS	7	2.2
POST-OPERATIVE MORBIDITY AT 7 DAYS[a]	4	4
POST-OPERATIVE VENOUS THROMBOEMBOLISM	5	9.7
DIFFICULT AIRWAY	6	2.8
ELECTIVE SURGERY CANCELLATION	9	7.7
NONSCHEDULED SURGICAL READMISSIONS	6	5.3
SURGICAL SAFETY CHECKLIST NON COMPLIANCE	14	6.4
ICU ADMISSION AFTER ELECTIVE SURGERY[b]	4	5
ICU NONSCHEDULED READMISSION OF SURGICAL PATIENTS[b]	7	6.8

TABLE 5. PROCESSES AND RESULTS INDICATORS IN THE PERIOPERATIVE MEDICINE SURVEY RESPONDERS IN PORTUGAL. (ICU – Intensive Care Unit; [b] Units without ICU were excluded; [a] other diagnosis besides the primary admission diagnostic)

IDENTIFIED AREAS OF IMPROVEMENT

- ANAESTHESIOLOGISTS ALLOCATION
- HIGH RISK SURGICAL PATIENTS IDENTIFICATION AND TRIAGE
- INPATIENT ELECTRONIC HEALTH ANAESTHESIA RECORD
- FUNCTIONAL POST-ANAESTHESIA CARE UNIT
- DEVELOPMENT OF PERI-OPERATIVE CARDIOVASCULAR DRUGS MANAGEMENT PROTOCOLS
- DEVELOPMENT OF OPERATING THEATRE ENVIROMENTAL CONDITIONS AND CRISIS RESPONSE CHECKLISTS
- INCLUSION OF PATIENT AUTONOMY, PRESSURE ULCER AND FALL RISK ASSESSEMENT IN THE PRE-OPERATIVE COMPREHENSIVE SURGICAL CHECKLIST
- EXPANSION OF THE ENHANCED RECOVERY PROGRAMMES
- PROMOTION OF INCIDENTS AND ADVERSE REACTIONS NOTIFICATION
- IMPROVEMENT OF PROCESSES AND RESULTS INDICATORS

PERIOPERATIVE MEDICINE COMMITTEE

GOALS

- Continuous improvement of perioperative medicine standards, to promote quality, patient safety and better outcomes.
- Identify the high-risk patient and articulate synergies along their path.
- Stimulate a learning culture with error, systematic reporting of incidents and drug reactions.
- Promote elaboration of recommendations transversal to the perioperative period, in articulation with vertical levels of organization.
- Promote policies to protect the patient and preserve doctor-patient relationship, particularly in groups at risk of vulnerability.
- Encourage safe communication in association with good practice guidelines, across the path of the patient.
- Promote education, scientific research and publication in the perioperative medicine field.

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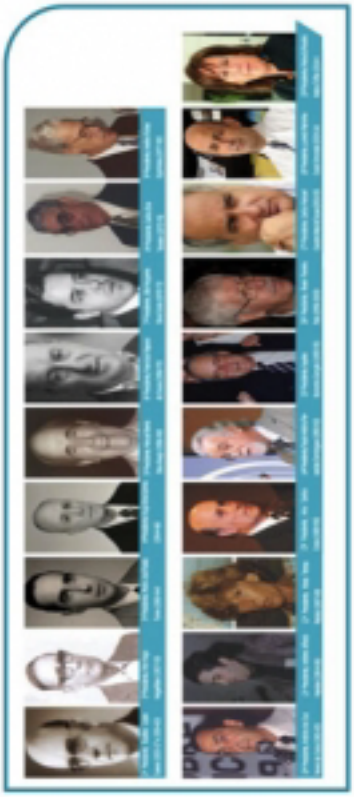

PORTUGUESE ANAESTHESIOLOGY SOCIETY

SPA Sociedade Portuguesa de Anestesiologia

INNOVATION

QUALITY

SAFETY

CONTINUING EDUCATION

Perioperative Medicine Committee

Euroanaesthesia 2017

PAST

1955

- 1955/07/15 - Foundation of the Portuguese Anaesthesiology Society

- Foundation of the **World Federation of Societies of Anaesthesiologists (WFSA)** in the World Congress of Anesthesiologists, in Scheveningen, Netherlands (The Portuguese Anaesthesiology Society was one of the 26 founding fathers).

- First Scientific Meeting of the SPA with ASA participation

1959

- Protocol SPA/SEDAR

- 1st Hispano-Luso Meeting

1964

- Foundation of the Anaesthesiology Societies Federation of the Portuguese Language Countries.

- 1st Luso-Brasileiro Meeting.

1985

- Publication of the Portuguese Anaesthesiology Society Journal.

PRESENT

(18th President)
Rosário Ortiz, MD

WHAT WE ARE:

The SPA is the Portuguese Anaesthesiology Society and as 788 affiliates.

COMMITEES (SECTIONS AND WORK GROUPS)

- Ambulatory Surgery
- Difficult Airway
- Educational and Training
- Guidelines Commitees
- Intensive Medicine
- Medical Simulation
- Neuro-Anesthesiology
- Obstetric Anesthesiology
- Paediatric Anesthesiology
- Pain Medicine
- Perioperative Medicine
- Quality and Safety
- Residents – Portuguese Trainee Network

WHAT WE DO:

- **National Guidelines**
- **Scientific Journal**
- **Education Activities as**
  - Annual National Congress on March
  - Focus Meeting with ESA in 2016
  - EDAIC/OLA – support and recommendation.
  - Government, Leadership and Strategy Meetings
  - Informal Scientific Tertulias on Sept/October
  - Paediatrician Anesthesia Meeting every two years
  - Obstetrics Anaesthesiology Meeting every two years
  - Annual Pain School
  - ICU day
  - CuFF-A – Teach the teachers in Anaesthesiology
  - Meetings with other Medical Scientific Societies
- **Apps**
  - Management of patient on Anticoagulant Therapy
  - Post-operative Pain Therapy
  - Report of Adverse Events
- **Information and Marketing**
  - I will be anesthetized – Patient information
- **National Traveling Exhibition**
  - The way Anesthesiology changed the world