



ANESTHESIA, INTENSIVE CARE, PAIN THERAPY, AND PALLIATIVE CARE DEPARTMENT

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UNITS

CLINICAL ANESTHESIA

Martin Langer

DAY SURGERY

Aldo E. Bono

INTENSIVE CARE

Myriam Favaro

PALLIATIVE CARE, PAIN THERAPY, AND REHABILITATION

Augusto T. Caraceni

SUPPORTIVE CARE IN CANCER

Carla I. Ripamonti

CLINICAL NUTRITION

Cecilia Gavazzi

The Department has 4 main missions: 1) perioperative medicine; 2) treatment of chronic pain and supportive care in cancer patients; 3) palliative care/terminal support in the hospice or in home care for patients with advanced cancer when active treatments failed; 4) safety in the hospital.

The cooperation among anesthesiologists and intensive care specialists, cardiologists and pneumologists, guarantees an adequate extensive preoperative evaluation and postoperative treatment of complex clinical situations. This perioperative team also contributed to the outstanding results obtained in the liver transplant program chaired by Vincenzo Mazzaferro. In collaboration with the Hospital management the Intensive Care Unit team develops also training programs for resuscitation from in-hospital cardiac arrest (BLS-D courses) as well as for other emergencies like fire and/or other major failures in the system. The Day Surgery Unit is devoted to surgical procedures performed in ambulatory and day hospital settings. Particular attention in our Department is devoted to the treatment of acute pain in postoperative patients, managed mainly by the anesthesiologists and a comprehensive multidisciplinary program to control pain and symptoms in patients with advanced and terminal cancer led by the palliative care physicians. Palliative care and admission to the Hospice is not exclusively restricted to end-of-life patients, but also allows, in selected cases, a better titration of palliative medication. The homecare service provides care for very severely or terminally ill patients and is deeply involved in the care network of Milan. An important international collaboration with the University of Trondheim, Norway, is ongoing. The Clinical Nutrition Unit treats patients suffering from any form of malnutrition and offers a comprehensive nutrition program. This Unit is a major referral centre for home artificial nutrition in Lombardy Region.

CLINICAL ANESTHESIA

HEAD

Martin Langer MD

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TECHNICIANS

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The Fondazione IRCCS at the Istituto dei Tumori runs a very intense surgical program. The Anesthesia Team also participates in challenging surgical procedures such as liver transplantation, major liver resection, peritonectomy, and resection of tumors in the thorax or retroperitoneum. The hospital is also a referral center for pediatric solid tumors and anesthesiologists are involved not only in the operating room (OR), but is also involved in many other procedures including catheter placement, diagnostics, and radiotherapy.

In June 2010, the new part of the Surgical Department with five ORs became available for clinical use and allowed for substantial improvement of safety standards and to increase the available OR time. Unfortunately, the number of nurses, anesthesiologists, and surgeons has not varied, and therefore the overall activity remained essentially the same with more than 7,000 major surgical procedures. In the second part of the year, 73 hours in nine ORs are available daily for surgical programs of the ten Surgical Services. The ORs are fully utilized. Quality improvement programs during 2010 were focused on patient safety (check list and TIME-OUT procedure) and care for acute, postoperative pain. Patient-controlled analgesia is needed in about 40–50% of patients undergoing major surgery, epidural analgesia with elastomeric pumps accounts for 20–25%, while continuous intravenous opioid infusion by an elastomeric pump is the treatment chosen for the remaining 30–40% of patients. The pain team visits patients for 3-4 days after surgery and tailors treatment as necessary.

Our training program for residents of the Anesthesia and Intensive Care Program of the University of Milan is well established and allows yearly 5–7 young physicians to become trained in clinical anesthesia and pain therapy.

Emiliano Tognoli is running a randomized, blinded, placebo-controlled trial on the possible opioid sparing effects of ketamine and methadone after surgery.

Keywords: anesthesia, acute pain therapy, operating room



2010 RELEVANT NOTES

Publications

Thoracic paravertebral anaesthesia for awake video-assisted thoracoscopic surgery daily. *Anaesthesia* 2010; 65:1221-4.

Daily monitoring of biomarkers of sepsis in complicated long-term ICU-patients: can it support treatment decisions? *Minerva Anestesiologica*. 2010; 76: 814-23.

DAY SURGERY

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The Day Surgery Unit is devoted to surgical procedures performed in ambulatory and Day Hospital settings. The Unit includes 10 beds, 2 operating rooms for various surgical activities, and one operating room for laser surgery. The permanent staff includes one physician, 9 nurses trained in the management of ambulatory surgical patients, and 3 secretaries. The clinical activity covers many aspects of oncologic surgery, and in particular involves different lesions involving skin, soft tissues, and breast, as well lesions in gynecological, urological, and head and neck areas. This activity involves physicians of the Department of Surgery, sometimes working in cooperation. During 2010, 4,866 surgical procedures were performed. Of these, 3,028 were performed in a Day Hospital setting, whereas 1,838 patients underwent outpatient surgery. 4,350 operations were performed under local anesthesia, while 516 were performed under sedo-analgesia or general anesthesia. In addition to normal surgical activity, other procedures were performed such as electrochemotherapy of secondary skin tumors (in collaboration with Melanoma and Sarcoma Unit) and fat injection or liposuction with the Coleman technique to lessen local skin and subcutaneous damage (in collaboration with Plastic and Reconstructive Unit). Clinical research activity is, at present, mainly performed in collaboration with the Melanoma and Sarcoma Unit. The aim of this activity is to better define the initial clinical features of early melanoma for curative surgery (see Multidisciplinary Project "Melanoma Program" page 31). A prospective study concerning narrower surgical margins (0.5 cm) for horizontal growth phase melanoma has been concluded, and the results will be soon published. A study on the clinical and dermoscopic features of small nodular melanoma of the skin has also been concluded and published.

Keywords: day-surgery, ambulatory surgery, early melanoma



INTENSIVE CARE

HEAD

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Monitoring and surveillance of high-risk surgical patients in the immediate postoperative period and intensive treatment of patients with life-threatening postoperative complications or organ failure are the mission of this Intensive Care Unit (ICU).

The Unit is equipped with 6 ICU beds and in 2010 admitted 602 patients (76% after scheduled surgery) for 1,587 treatment days. Two physicians during the day and one in the night are available, together with the nurses of the ICU, for emergencies in the INT, counseling for critically-ill patients in the different wards and blood gas and point-of-care analyses for all patients.

431 central venous catheters, both as elective and as emergency procedures, have been placed by ICU physicians; we also started a program for the long-term catheter positioning (12 Groshong catheters). Liver function was investigated in 91 patients, mainly preoperatively, before major liver resections.

Percutaneous tracheotomy ("Griggs") was performed in 20 patients on prolonged mechanical ventilation. We continue to treat patients with failing liver function and hyperbilirubinemia with extracorporeal "plasma-adsorption-perfusion".

We continued activities in the surgical day hospital: sedo-analgesia in patients scheduled for limited resections of breast cancer (153 patients) and we adopt sedo-analgesia even for patients with metastatic melanoma, in plastic surgery (30 patients), in radiology and endoscopy non-surgical procedures (646 patients).

We took part in a new national study (ALBIOS) on the efficacy of albumin administration for volume replacement in patients with severe sepsis or septic shock, and from 2008 we collaborated with the Italian GiViTi Network in the MARGHERITA project, which aims to improve the quality of ICU care through the analysis of epidemiological data.

Keywords: intensive care; emergency in hospital; anesthesia for day surgery

2010 RELEVANT NOTES

Technologies

This ICU has been chosen as Italian lead in the Clean Care Project of the WHO to optimize patients safety in the hospital.

Collaborations

The unit is part of the Italian GiViTi (Gruppo Italiano Valutazione Interventi in Terapia Intensiva) network



PALLIATIVE CARE, PAIN THERAPY, AND REHABILITATION

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The clinical and research programs reflect the two-fold mission of the unit: palliative care/pain and rehabilitation. This program is characterized by a multidisciplinary and multi-professional approach encompassing control of physical symptoms, psychological and social support, and the alleviation of spiritual/existential suffering with early integration of all antineoplastic interventions according to the "simultaneous care" model. Cancer rehabilitation includes interventions that are appropriate for the recovery of acute and chronic consequences of surgery, radiotherapy, and medical treatments as well as to support the complications of advanced cancer.

In 2010, the following results highlight the widespread clinical activities: 221 inpatient unit (Hospice) admissions, 2,357 day-hospital admissions, 30,513 outpatient clinic calls, 11,798 inpatient consults, and 163 home care (hospital at home) admissions.

The research program in 2010 continued building on multicenter, international collaborations together with individual and national projects. The status of the Unit within the European Palliative Care Research Center (PRC) was formally acknowledged in a contract between the INT and the University of Science and Technology in Trondheim (Norway) and a number of projects were concluded and/or continued:

- Cancer pain assessment and classification, international consensus, systematic reviews and empirical research
- Cancer pain opioid guidelines in collaboration with the European Association for Palliative Care
- Translational research on opioid pharmacogenomics
- A multicenter national trial on control of cancer pain with different opioids in collaboration with the Mario Negri Institute.
- A phase II trial on methylnaltrexone for opioid induced constipation
- Systematic review on hydration and nutrition within OPCARE (FP7)
- National cluster randomized trial on the Liverpool Care Pathway

Keywords: palliative care, cancer pain, rehabilitation, end-of-life care

2010 RELEVANT NOTES

Collaborations

Istituto di Ricerche Farmacologiche Mario Negri, Milano

Department of Cancer and Molecular Biology, Norwegian University of Science and Technology, Trondheim

Istituto Nazionale Tumori (IST) IRCCS, Genova

Publications

Assessment and classification of cancer breakthrough pain: a systematic literature review. *Pain* 2010;149: 476-82.

The validity of average 8-h pain intensity assessment in cancer patients. *Eur J Pain* 2010; 4: 441-5.

Contributions

Editorial board of *Journal of Pain and Symptom Management*, *Minerva Anestesiologica*



SUPPORTIVE CARE IN CANCER

HEAD

Carla I. Ripamonti, MD PhD

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Sorgato, Pietro Toma

VOLUNTEERS

Italian League Against Cancer (Milan
section)

The Supportive Care in Cancer Unit at the INT (out-patient and Day Hospital settings) cares for patients sent from all INT Units starting from the diagnosis of cancer throughout the period of active oncological therapies with the aim to prevent and treat all symptoms caused by therapies according to MASCC guidelines (www.mascc.org).

We work in integration with all hospital Units and administer the following therapies: hydration, transfusions, antiviral agents, antibiotics, analgesic drugs, IV nutrition (not TPN), and IV bisphosphonates. Moreover, we carry out prevention and treatment of osteonecrosis of the jaw in collaboration with Dental Team. All patients are regularly assessed for the presence and the intensity of physical and psychological symptoms and spiritual and social needs. They have visit from the chaplain and/or social worker and/or psychologists during the infusion of drugs in the Supportive Care Unit. All patients are on active oncological therapies, and thanks to the supportive care their physical and emotional conditions improve and can undergo to chemotherapy or radiotherapy under better conditions.

The clinical activity in 2010 included 2,493 clinical visits, 1,189 in Day Hospital, 1,435 infusions in an out-patient regimen, 390 transfusions, and 503 administrations of bisphosphonates (zoledronic acid).

Keywords: supportive care, patients on oncological treatments, bone health

2010 RELEVANT NOTES

Collaborations

Department of Oncology, Hematology and Respiratory Diseases, Azienda Ospedaliera Universitaria, University of Modena and Reggio Emilia

Department of Clinical Pharmacology and Epidemiology, Consorzio Mario Negri Sud, Santa Maria Imbaro (Chieti)

Psychology Unit, Center for Oncological Rehabilitation-CERION of Florence
Clinical Epidemiology Unit, ISPO-Institute for the Study and Prevention of Cancer, Florence;

Department of Psychology University of Milan Bicocca

CeVEAS, WHO Collaborating Center, Modena

Liguria Regional Coordination of Palliative Care, (IST), Genova

Palliative Care Unit ASL Bi-Biella

Campus Biomedico Rome

University of Verona (Specialties of Internal Medicine-Reumatology-Oncology)

Istituto Scientifico Romagnolo

University of Torino (Specialization in oncology)

World Health Organization for cancer pain relief (WHO)

European Society Medical Oncology (ESMO) for Palliative Care Working Group

Multinational Association Supportive Care in Cancer (MASCC) for psychosocial and spiritual working group

Publications

Formulary availability and regulatory barriers to accessibility of opioids for cancer pain in Europe: a report from the ESMO/EAPC Opioid policy initiative. *Ann Oncol.* 2010;21:615-26.

Impact of setting of care on pain management in patients with cancer: a multicentre cross-sectional study. *Ann Oncol.* 2010;21:2088-93.

System of belief inventory (SBI-15R): a validation study in Italian cancer patients on oncological, rehabilitation, psychological and supportive care settings. *Tumori.* 2010;96:1016-21.

Contributions

Updated Guidelines on the Use of Bisphosphonates in Bone Metastases (coordinator Daniele Santini) for the Associazione Italiana di Oncologia Medica (AIOM)

Adviser in the working group for the preparation and the development of the WHO Guidelines for pharmacological treatment of persisting pain in children with medical illnesses

Re-elected as Italian Member of the Palliative Care Working Group of the European Society Medical Oncology (ESMO PCWG)

Re-elected as Italian Member of Directors of the International Association Hospice Palliative Care (IAHPC)

Invited as ESMO Media Ambassador for Pain Therapy and Supportive Care topics



CLINICAL NUTRITION

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TECHNICIAN

Colatruglio Silvi

The prevention and the treatment of malnutrition are the major goals of this Unit. Malnutrition is a well known negative prognostic factor in the final prognosis of cancer patients, and it reduces tolerance to oncological treatment, increases morbidity and mortality, and worsens the quality of life; nutritional intervention should be considered throughout all different oncologic phases, from diagnosis, during surgery, to chemotherapy and radiotherapy.

In accordance with the European Society of Clinical Nutrition, nutritional screening is carried out in all patients with a high risk of malnutrition, i.e. patients affected by gastrointestinal cancer, candidates for major surgery and patients affected by head and neck cancer and candidate for combined chemotherapy and radiotherapy.

Patients affected by any form of malnutrition are included in a comprehensive nutrition program that consists in nutritional status monitoring and personalized nutrition therapy, mainly with artificial nutrition, enteral and parenteral, nutritional counseling, and diet therapy. For those patients who need a prolonged period of artificial nutrition, specific training is performed by specialized nurses, logistic procedure are organized, and patients are discharged on home artificial nutrition.

In 2010, 406 inpatients were included in a nutrition program and 2,723 days of nutrition therapy were administered; 81 patients were discharged on home artificial nutrition.

Keywords: malnutrition, nutrition therapy, gastrointestinal cancer

2010 RELEVANT NOTES

Collaborations

Italian Society for Artificial Nutrition and Metabolism (SINPE)

Contributions

AIOM Guidelines on Prevention and Treatment of Cancer Cachexia

