



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Surgery - 1

2627-3-I0102D017-I0102D058M-T1

Aims

The course addresses the growing need for specialisation in the field of perinatal intensive care. It aims to broaden the theoretical and practical knowledge of future professionals, actively involving them in both emergency and elective surgical procedures.

The main objective is to train professionals who are able to integrate seamlessly into multidisciplinary teams in delivery theatres and third-level operating theatres.

By the end of the course, learners will have developed sharp clinical reasoning skills and the comprehensive overview essential for working in a critical care setting. They will be able to anticipate the needs of the surgeon and anaesthetist, optimising operating times and significantly reducing the overall clinical risk. This programme represents a fundamental step in the evolution of the midwifery profession towards roles involving increasing autonomy, responsibility and specialist expertise. Investment in training in this sector directly translates into improved standards of safety and care for both the mother and the newborn.

Contents

The course is divided into three main areas:

A_The biological, pathophysiological and clinical foundations of modern neonatal surgery

B_The management of the pregnant patient with multiple trauma

C_Emergency surgical treatment of non-obstetric conditions that may arise during pregnancy

The course will also provide the psychological skills needed to support parents when faced with a poor prognosis, complex procedures or traumatic perinatal loss. The patient's transition from the delivery room to the operating theatre requires a key support figure capable of ensuring continuity of care and empathy.

Detailed program

A_ The main congenital malformations requiring a planned corrective approach, such as omphalocele, gastroschisis and digestive atresias, will be discussed in depth. Considerable attention will be given to immediate neonatal surgical emergencies, notably congenital diaphragmatic hernia, bilateral choanal atresia, intestinal volvulus and necrotising enterocolitis. Students will learn pre-operative stabilisation protocols, intensive monitoring of vital signs and specific post-operative care for the vulnerable newborn.

B_ Through the analysis of international guidelines, the course will examine the impact of road traffic, domestic and accidental trauma on the profoundly altered physiology of the pregnant woman. The course will guide students in the systematic application of emergency triage, focusing on the absolute priority of maternal haemodynamic stabilisation. Complications secondary to trauma, such as placental abruption, uterine rupture and the onset of massive internal haemorrhage, will be analysed. A specific section will be devoted to decision-making criteria and techniques for the rapid delivery of the foetus via emergency or perimortem caesarean section.

C_ Students will acquire the ability to make a correct differential diagnosis in cases of acute abdominal pain during pregnancy. The clinical management of acute appendicitis will be explored in depth, analysing how the displacement of the uterus alters the presentation of symptoms and anatomical landmarks. Intervention protocols for acute cholecystitis and intestinal obstructions will be studied, evaluating the conservative approach in comparison with the surgical approach. The course will compare the benefits and risks associated with the use of minimally invasive laparoscopic techniques versus traditional laparotomy in pregnant women.

Prerequisites

None.

Teaching form

Lecturers.

Textbook and teaching resource

Lecture slides provided by the lecturer

Anne R. Hansen, Mark Puder, Manual of Neonatal Surgical Intensive Care_ Wolters Kluwer Health 2024. ISBN 9781975222451

Scambia G., Scollo P., Vizza E., Ghezzi F., Trattato di chirurgia ostetrica e ginecologica_ Edra ed. 2019. ISBN 9788821448690

Dionigi R., Chirurgia: Basi teoriche e chirurgia generale-Chirurgia specialistica vol. 1-2 Edra ed. 2022. EAN 9788821454356

Felis S., Emergenze e urgenze in ostetricia - Dall'evidenza scientifica alla corretta gestione clinica e terapeutica_Falco edizioni scientifiche 2024. ISBN 9791280774514

Semester

2nd semester

Assessment method

Oral test with discussion of the topics covered in the lectures.

Office hours

On appointment.

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING
