

Postgradual module for residents and trainees

Currently the mandatory resident skills program includes:

The **first week** focus on the general surgical techniques, with simulated materials such as knot tying, anastomosis principles and practices *ex vivo* and *in vivo*, and conventional organ preparations and intraabdominal operations.

The **second week** covers minimal access surgery including vital procedures, the use of instruments, eye-hand coordination and intraabdominal manoeuvres.

The **third week** is dedicated to microvascular microsurgery.

1st week: GENERAL SURGERY

Aims

- To teach basic surgical techniques, instruments and materials.
- To improve dexterity and eye-hand coordination.
- Final aim: the students are going to be able to perform minor surgical interventions, preparation of organs and anastomosis on them.

General surgery - theme

1. day	Computer skill	Instruments, knot tying and basic suture skills (<i>Suture Tutor program</i>)
2. day	Ex vivo Ex vivo	Skin incision, handling surgical bleedings; Minor surgical skills: ellipse excision, epidermoid cyst and lipoma removals (<i>Minor skills program</i>); Drainage; Closing wounds in separate layers; Vascular suture technics;
3. day	In vivo Ex vivo	Endotracheal intubation; Skin incision, handling surgical bleedings, Dissection/ cannulation of veins and arteries; Tracheostomy; Gastrointestinal suture technics;
4. day	In vivo	Laparotomy, appendectomy, splenectomy, bowel anastomosis, stoma; Invasive hemodynamic monitoring;
5. day	In vivo	Thoracic drainage: insertion of chest tube; Thoracotomy Practical test and evaluation;

1. day - Skill lab Knot tying and basic suture skills using Suture Tutor program



1. day - Skill lab Knot tying on practice board

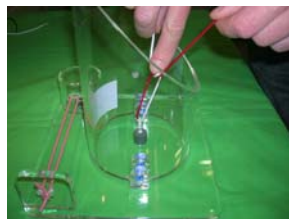


1. day - Skill lab Knotting in cavities

1. Square, surgical and Viennese-style knots
2. Knotting with instruments



3. Knotting in the depths of a cavity



4. Knotting in the abdomen

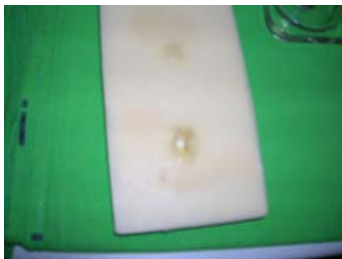


5. Knotting in the lesser pelvis

1. day Skill lab
Suture technics in practicing pad



2. day - Skill labor
Minor surgical skills: ellipse excision, epidermoid cyst and lipoma removals (*Minor Skin Procedures*)



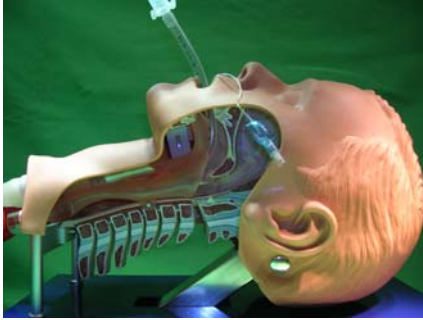
**2. day – Student's operating room:
Minor surgical skills ex vivo**



**2. day – Student's operating room:
Vascular suture technics - ex vivo**



**3. day - Student's operating room:
Endotracheal intubation on dady and
anesthetized minipig**



**3. day - Student's operating room:
Skin incision, handling surgical bleedings,
dissection/ cannulation of veins and arteries on
anesthetized minipig**



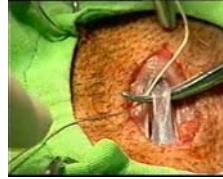
3. day - Student's operating room: Dissection - cannulation of veins and arteries on anesthetized minipig



Skin incision



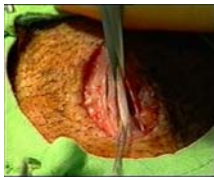
Blunt preparation



Doubled thread under the vein



Distal and proximal dividing



Opening the lumen



Forcep introducing into lumen



Introducing the catheter



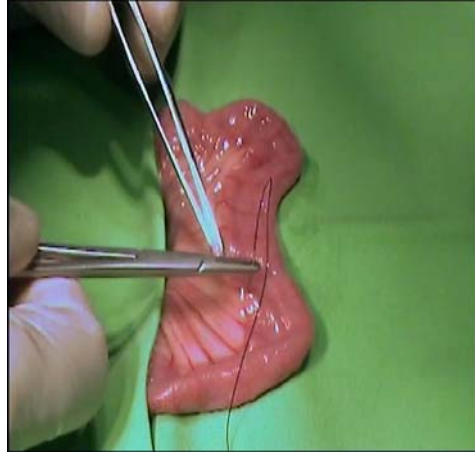
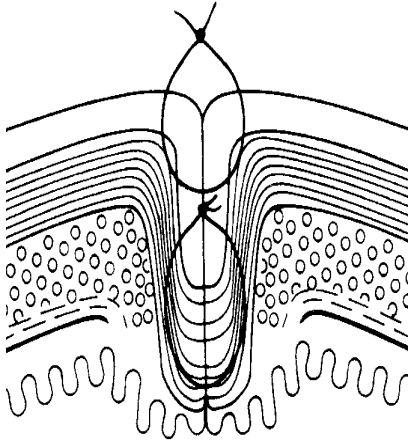
Fixing the catheter



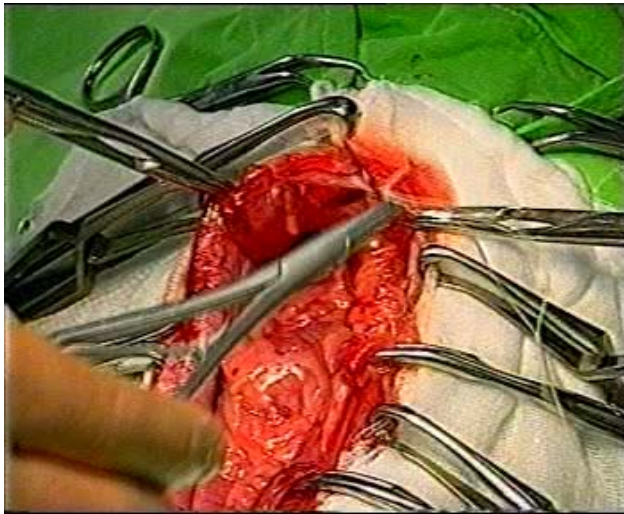
3. day - Student's operating room: Tracheostomy on anesthetized minipig



**3. day - Student's operating room:
Gastrointestinal suture *ex vivo***



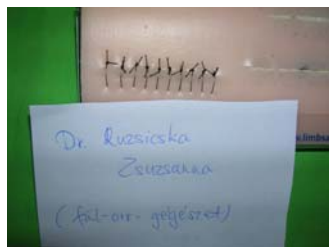
**4. day - Student's operating room:
Laparotomy, appendectomy, splenectomy and
bowel anastomosis on anesthetized minipig**



**5. day - Student's operating room:
Thoracic drainage and thoracotomy on
anesthetized minipig**



**5. day (afternoon) - Skill lab
Practical test and evaluation**



Evaluation of resident module by participants

	2008	2009	2010
Importance of resident practice:			
from aspect of professional practice	4,44	4,81	4,27
from aspect of manual skills	3,74	4,81	4,33
from aspect of yours clinical practice in the future	4,33	4,67	4,6
Utilization of available time	3,77	4,19	3,93
Your numeric opinion about the lectures	4,26	4,30	4,53
Your numeric opinion about the practices	3,96	4,57	4,26
Your numeric opinion about the rate of lectures and practices	3,92	4,54	4,2
Usefulness of teaching tools, models, computer softwares	4,07	4,108	4,24
Evaluation of teacher's activity	4,44	4,7	4,46