

Anesthesia and Intensive care unit & Pain Management (APM-320)



**Upper Egypt Faculties of Medicine
Sohag University**

Prepared by

Departments of:

-Anesthesia,ICU and pain management

2025-2026

**Contact Information of Staff Responsible for Block
(APM-320)**

Block (APM-320)

Coordinator

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Asiss. Prof./ of Anesthesia,ICU and pain management

Head of the sharing department	
Prof./Fawzy Abas Badawy	Anesthesia,ICU and pain management

Staff Participated from the Department

All staff members of Anesthesia,ICU and pain management department

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Basic Information about the Block

• **Program on which the course is given:** Bachelor of Medicine and Surgery (M.B. B.Ch.).

• **Elements (major or minor) of the program:**

Undergraduate

• **Department offering the course:**

Anesthesia, ICU and pain management

Academic. year/level:

3th year/ SIXTH semester

Date of specification approval:

2024-2025/ 2025-2026

⊙ **Title:** Anesthesia, ICU and pain management

⊙ **Code:** APM - 320

⊙ **Credit points:** 3

⊙ **Weeks:** 2 weeks.

⊙ **Lectures:** 18 hours

⊙ **Practical:** 18 hours

⊙ **Case- based discussions :**9 hours

⊙ **Formative assessment :** 15 hours. (0.5 point)

⊙ **Student learning activities: 45 hours including**

Portfolio- based assignments : (30 hours)

Total hours : 90 hours.

“Block Map”

The total hours of the final written exam	Total marks	Days/weeks	Points	Code	Responsible department	Block الوحدة التعليمية	Year
1	60	2hour/week for 28 week	3	APM-320	Anesthesia,ICU and pain management	Anesthesia,pain management,intensive care,fluids and electrolytes	3 RD year

NARS competencies covered by the block
Clinical Rotations (Blocks)/ Competencies

- The competency areas of the NARS- Anesthesia
- competency framework are:
 - 1- The graduate as a health care provider.
 - 2- The graduate as a health promoter.
 - 3- The graduate as a professional.
 - 4- The graduate as a scholar and scientist.
 - 5- The graduate as a member of the health team and a part of the health care system.
 - 6- The graduate as a lifelong learner and researcher.

Upon completion of this course students should be able to:

- 1.1 Take and record a structured, patient centered history.
- 1.2 Adopt an empathic and holistic approach to the patients and their problems.
- 1.3 Assess the mental state of the patient.
- 1.4 Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.
- 1.5 Prioritize issues to be addressed in a patient encounter.
- 1.6 Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors.
- 1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice.

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- 1.8 Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand.
- 1.9 Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM).
- 1.10 Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation..
- 2.1 Identify the basic determinants of health and principles of health improvement.
- 2.2 Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing.
- 2.3 Discuss the role of nutrition and physical activity in health.
- 2.4 Identify the major health risks in his/her community, including demographic, occupational
- 3.1 Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect.
- 3.2 Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate.
- 3.3 Respect the different cultural beliefs and values in the community they serve.
- 3.4 Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities. and environmental risks; endemic diseases, and prevalent chronic diseases.
- 4.1 Describe the normal structure of the body and its major organ systems and explain their functions.
- 4.2 Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis.
- 4.3 Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family.
- 4.4 Explain normal human behavior and apply theoretical frameworks of psychology to interpret
- 5.1 Recognize the important role played by other health care professionals in patients' management.
- 5.2 Respect colleagues and other health care professionals and work cooperatively with them, negotiating overlapping and shared responsibilities and engaging in shared decision-making for effective patient management.
- 5.3 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.
- 5.4 Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system. the varied responses of individuals, groups and societies to disease.
- 6.1 Regularly reflect on and assess his / her performance using various performance indicators and information sources.
- 6.2 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice.
- 6.3 Identify opportunities and use various resources for learning.
- 6.4 Engage in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

Block Aims

Overall Aims

1. This block aims to provide students with fundamental knowledge and clinical skills that enable him/her to detect, manage and/or refer common and important **respiratory,airway and hemodynamic compromise in the theater.**
2. By the end of the blocks, the students will be able to take informative history, anesthetic consent,define anesthetic equipments and drugs,perioperative monitoring.
3. By the end of the block,the student should be familiar with the differtent parts of the modern anesthesia machine
4. By the end of the block,the student should know the principles of general anesthesia
5. By the end of the block,the student should know the basics of regional anesthesia
6. By the end of the blocks,the students will be able to perform some skills as intravenous cannulation,airway management including endotracheal intubation and laryngeal mask airway insertion .
7. By the end of the blocks,the student should be able to relief postoperative pain
8. by the end of the block,the student should be able to perform efficient basic life support
9. By the end of the blocks, the students will be able to counsel patients and their families about the selection of a suitable and appropriate anesthetic.
10. By the end of the block the student should know the intraoperative anesthetic risks

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11. By the end of the block, the student should know all the possible postoperative complications and how to deal with them

Intended Learning Outcomes of the Block:

A- Knowledge and understanding

Upon completion of the course students should be able to:

- A1- Define anesthesia and how to conduct it safely.
- A2- Select the ideal anesthetic for a particular patient.
- A3- Define anesthetic complications and how to manage them.
- A4- Select cost effective anesthetic technique.
- A5- Integrate the results of history, physical examination and laboratory test findings into a suitable anesthetic technique.
- A6- Describe the informed consent
- A7- Manage postoperative pain, nausea and vomiting properly.
- A8- Identify the support of the airway properly
- A9- Recognize cardiac massage
- A10- Identify patent airway
- A11- Apply Ventilation during cardiac arrest
- A12- Apply oxygen therapy devices
- A15- Select the ideal venous approach and the significance of arterial cannulation and suitable fluid therapy
- A16- Apply Standard intraoperative monitoring

C- Clinical skills

By the end of the course, students should be able to:

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C1- Obtain and record informative history and consent.

C2-Examine the patients systematically appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive.

C3- Design and /or present a structured, patient centered history and an appropriately timed full physical examination of patients.

C4-How to manipulate the neck and mandible to open the airway.

C4- Show how to use peripheral venous cannula, urethral catheter; performing and interpreting ECG, endotracheal tube, laryngeal mask and ryles tube insertion.

C5- Apply measures that promote patient safety.

C6. Apply suitable measures for infection control when dealing with the patients and instruments.

C7- Conduct patient-focused care while working with health care professionals.

C8-Select the suitable oxygen device therapy

C9-Perform efficient basic life support

D- General and transferable skills

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- D1- Perform practice-based improvement activities using portfolio.
- D2- Practice effectively using a written health record, electronic medical record, or other digital technology
- D3-Display effective communication with patients, their families and community through proper verbal and written means, respecting their beliefs and level of education.
- D4- Display respect, compassion, and integrity; a responsiveness to the needs of patients and society.
- D5- Display a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent.
- D6- Work effectively with others as a member of team work by acting in small group.
- D7- Display adequate cooperation with his/her colleagues
- D8- Arrange the efforts required to accomplish the tasks in specified time.
- D9- Verify the use of sources of biomedical information to remain current with advances in knowledge and practice.
- D10- Share in the work efficiently in responsible manner keeping the Instruments and Equipment of the theatre intact and clean.
- D11-Adhere to the basic ethical and medicolegal principles that should be applied in practice.
- D12- Describe his/her work and that of others using constructive feedback.
- D13-Present regular reflection on and assess his/her performance using various performance indicators and information sources.
- D14- Initiate a personal learning plan to enhance professional practice
- D15- Identify opportunities and use various resources for learning.

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D16- Integrate in inter-professional activities and collaborative learning to continuously improve personal practice and contribute to collective improvements in practice.

D17- Organize learning time and resources and set priorities

D18- Display accountability to patients, society, and the profession.

Structure of the block

<i>Week</i>	Lect ures (NUMBER)	Practical (NUMBER)	PORTFLIO TASKS (NUMBER)	CASE BASED Discussions (NUMBER)	Revisions and Exams	Total
1st	1	0	1	1		3
2nd	1	0	1	1		3
3rd	1	0	1	1		3
4th	1	1	1	0		4
5th	1	0	1	1		3

6th	1	1	1	0		3
7th	1	1	1	0		3
8th	1	1	1	0		4
9th	0	1	1	0	1	3
10th	0	1	1	0	1	3
11th	0	1	2	1		4
12th	0	1	2	1		5
13th	0	1	2	1		4
14th	0	1	2	1		4
15th	1	1	0	0	1	3
16th	1	1	1	0		4
17st	1	1	1	0		3
18th	1	1	1	0		3
19th	1	1	1	0		3
20	1	0	1	1		4
21	0	0	1	1	1	3
22th	0	0	0	1	1	2
23th	1	1	2	1		5
24th	0	0	2	1		4
25	0	0	1	2		3
26	0	0	0	0	2	2
27	0	0	0	0	2	2
28	0	0	0	0	2	2

Learning Methods

- 1- Lectures for knowledge outcomes.
- 2- Practical (Bedside/skill lab) sessions to gain clinical skills
- 3- 3-Task based log. (may use inscion academy/clinical key cases)
- 4- Group discussions(Case – based) .

Methods of Student Assessment

1. Formative:

This is used to monitor student's learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning.

It's given at least once in the form of quizzes that is made available for the students at the E-learning site at the end of the block.

Answers are presented instantly after the attempts and discussed on the students groups or in person with the teaching staff

Questions should be consistent with the level of the final exam. The student's attendance is a condition for entering the summative exams. The electronic or paper achievement file must be used to follow up on the students' evaluation, and its completion is a condition for entering the final exams

2. Summative

It is used to evaluate student's achievements at the end of an instructional unit. The grades tell whether the student achieved the learning goal or not.

The student's performance will be assessed according to the following:

الدور الأول First Role

Assessment task	Type of assessment	Proportion of total assessment	
		%	Marks
End block exam	MCQ (only correct answer)	20%	12 marks
Portfolio	May include inscion academy certificates	10%	6 marks
Final written exam	MCQ (only correct answer) (50%MCQ+ 50% short answer questions and MEQs)	40%	24 marks
OSCE Final	Typical OSCE stations using standardized, real or skill lab encounters	30%	18 marks
Total		100%	60

الدور الثاني Second Role

Assessment task	Type of assessment	Proportion of total assessment	
		%	Marks
Final written exam	MCQ (only correct answer) (50%MCQ+ 50% short answer questions and MEQs)	60%	36 marks
OSCE Final	Typical OSCE stations using standardized, real or skill lab encounters	40%	24 marks
Total		100%	60

Block evaluation

- Students' results
- Students' feedback

Block Contents

Lecture Topics and Their Intended Learning Outcomes

Choose one source for each topic

No.	Subcomptancies A	Lectures Titles And specified reference	Week No.	Contact Hours
1	A6	Consent oxford handbook of Clinical Medicine. (10 edition , P:568, 569	1 st	1
2	A1,A2	Preoperative care Oxford handbook of Clinical Medicine (10 edition P: 566,567	2 nd	1
3	A1,A2	Preoperative care Oxford handbook of Clinical Medicine (10 edition P: 566,567	3 rd	1

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4	A7	Airway management Amboss	4 th	1
5	A4,A5	General anesthesia Oxford handbook of Clinical Medicine (10 edition P:572,573	5 th	1
6	A4,A5	Regional anesthesia Oxford handbook of Clinical Medicine (10 edition P:573	6 th	1
7	A14	Intra-operative monitoring	7 th	1
8	A9,A10,A11	Basic life support	8 th	1
9		Revision	9 th	1
10	A2,A3,A4	Intraoperative anesthetic risk Oxford handbook of Clinical Medicine (10 edition P:572	15 th	1

11	A2,A3,A4	Postoperative complications Oxford handbook of Clinical Medicine (10 edition P: (576)	16 th	1
12	A2,A3,A4	Postoperative complications Oxford handbook of Clinical Medicine (10 edition P:576	17 th	1
13	A15	Fluid therapy	18 th	1
14	A12	Oxygen therapy Amboss	19 th	1
15	A7	Postoperative pain therapy Oxford handbook of Clinical Medicine (10 edition P:574)	20 th	1
16		Revision	21 st	1

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17		Revision	22 nd	1
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Skills and tasks and Their Intended Learning Outcomes

In addition to real patients and skills stated in the NARS should be learned either in practical or group discussion

No.	subcomptancies C and D	Bedside/skill lab sessions and titles	Weeks	Hours
1.	C1 D1-D18	Consent, ake history:previous anesthetic exposue,drugs and symptoms of different diseases relevant to anesthesia	4 th	1
2.	C2,C3, D1- D18	Examination before induction of anesthesia	6 th	1
3.	C5,C6,C7 D1-D18	Different manoeuvres for airway opening	7 th	1
4.	C5,C6,C7 D1-D18	Endotracheal intubation	8 th	1
5.	C5,C6,C7 D1-D18	Laryngeal mask airway insertion	9 th	1
6.	C5,C6,C7 D1-D18	Flexible fiberoptic laryngoscopy	10 th	1
7.	C5,C6,C7 D1- D18	Basic life support	11 th	1
8.	C5,C6,C7 D1-D18	Assessment of recovery from general anesthesia	12 th	1
	C5,C6,C7	Management of	13 th	

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	D1-D18			
9.		intraoperative hypotension		1
10.	C5,C6,C7 D1-D18	Discharge from post anesthesia care unit	14 th	1
11.		Revision	15 th	1
12.	C5,C6,C7 D1-D18	Management of delayed recovery	16 th	1
13.	C5,C6,C7 D1-D18	Oxygen therapy for a hypoxemic patient in the ICU	17 th	1
14.	C5,C6,C7 D1-D18	Intravenous cannulation and fluids	18 th	1
15.	D1-D18 C5,C6,C7	Assesment of postoperative pain	19 ^h	1
16.	D1-D18 C5,C6,C7	Postoperative pain management	23 th	1
17.		Revision	28	2
		Total		18

Self Directed Learning and Group Discussion(SDL &GD)(cases scenario with 10 MCQs)

No.	Subcomptancies A and D	Title of cases and reference	Weeks	Hours
1.	A5 D1- D18	Case 1Preoperative history Handout	1 st	1
2.	A5 D1- D18	Case 2 Preoperative examination Handout	2 nd	1

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4	A5 D1- D18	Case 3Premedication of a surgical patient	3 rd	1
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		Handout		
5	A5 D1- D18	Case 4Evaluation of the airway Handout	5 th	1
7	A5 D1- D18	Revision	10 th	1

8	A5 D1- D18	Case 5 Induction and maintenance of general anesthesia Handout	11 th	1
9	A5 D1- D18 A5 D1- D18	Case6 Spinal anesthesia Handout	12 th	1
10	A5 D1- D18	Case 7 Local anesthesia overdose Handout	13 th	1
11	A5 D1- D18 A5 D1- D18	Case 8 Cardiac arrest Handout	14 th	1
12	A5 D1- D18	Case 9 Haemodynamic monitoring and management of hemodynamic instability	20 th	1
13	A1-A5,A14 D1-D18	Case10Intraoperative hypothermia Handout	21 nd	1
14	A1-A5,A14 D1-D18	Case 11 Aspiration Handout	23 rd	1
15	A1-A5,A7D1-D18	Case12 Delayed recovery from general anesthesia Handout Case13 Postoperative pain Handout	24 th	2
16	A1-A5,A14 D1-D18	Case14 Respiratory failure in the recovery room Handout	25 th	1
17	A1-A5,A14 D1-D18	Case15 Central anticholinergic syndrome Handout	25 th	1

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		Revision	26 th	2

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18				
	Total			18

Formative assessment

This is used to monitor student's learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning.

It's given at least once in the form of quizzes that is made available for the students at the E-learning site at the end of the block.

Answers are presented instantly after the attempts and discussed on the students groups or in person with the teaching staff

Questions should be consistent with the level of the final exam. The student's attendance is a condition for entering the summative exams. The electronic or paper achievement file must be used to follow up on the students' evaluation, and its completion is a condition for entering the final exams

Blueprint of the block

No.	List of Topics (lectures/cases)	ILOs Sub- competencies	Weight* from	Total marks	End of the block	Final written exam 50% مقال SAQs & MEQs
1.	Pre operative assessment & consent	A6	6.25%	2 marks	1	1
2.	Pre Anesthetic Medications	A.1,A2	6.25%	2 marks	1	1
3.	General Anesthetic	A1,A2	6.25%	2 marks	1	1
4.	Inhalational Anesthetic	A7	6.25%	2 marks	1	1
5.	Regional anesthesia	A4,A5	6.25%	2 marks	1	1
6.	Local Anesthetic toxicity	A4,A5	6.25%	2 marks	1	1
7.	Skeletal muscle relaxant	A14	6.25%	2 marks	1	1
8.	Intraoperative monitoring	A9,A10,A11	6.25%	2 marks	1	1
9.	Intraoperative anesthetic risk	A2,A3,A4	6.25%	3 marks	1	2
10.	Postoperative complications	A2,A3,A4	6.25%	3 marks	1	2
11.	Oxygen therapy	A2,A3,A4	6.25%	3 marks	1	2
12.	Cardio pulmonary resuscitation	A15	6.25%	3 marks	1	2
13.	Fluid therapy	A2,A3,A4	6.25%	2 marks		2
14.	Postoperative pain management	A2,A3,A4	6.25%	2 marks		2
15.	Respiratory failure in recovery room	A12	6.25%	2 marks		2
16.	Airway management	A7	6.25%	2 marks		2
	Total		100%	36	12	24

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	List of skills	ILOs subcomptancies	Weight*	Number of stations	Marks of OSCE	
					الدور الأول %30	الدور الثاني %40
1.	Taking a consent	C1 D1- D18	6.25	1	1	1
2.	Taking history:previous anesthetic exposure,drugs and syptoms of different diseases relevant to anesthesia	C1 D1- D18	6.25	1	1	1
3.	Examination before induction of anesthesia	C1 D1- D18	6.25	1	1	2
4.	Different maneuvres of airway opening	C5,C6,C7 D1-D18	6.25	1	1	2
5.	Endotracheal intubation	C5,C6,C7 D1-D18	6.25	1	1	2
6.	Laryngeal mask airway insertion	C5,C6,C7 D1-D18	6.25	1	1	1

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7.	Flexible fiberoptic laryngoscopy	C5,C6,C7, D1-D18	6.25	1	1	2
8.	Basic life support	C5,C6,C7, D1-D18	6.25	1	1	1
9.	Assesment of recovery from general anesthesia	C5,C6,C7, D1-D18	6.25	1	1	2
10.	Management of intraoperative hypotension	S5,S6,S7 G1-G18	6.25	1		2
11.	Discharge from postanesthesia care unit	C5,C6,C7, D1-D18	6.25	1		2
12.	Management of delayed recovery	C5,C6,C7, D1-D18	6.25	1	1	2
13.	Oxygen therapy for a hypoxemic patient	C5,C6,C7, D1-D18	6.25	1	1.5	1

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14.	Intravenous cannulation and fluid administration	C5,C6,C7, D1-D18	6.25	1	1.5	1
15.	Assesment of postoperative pain	C5,C6,C7, D1-D18	6.25	1	1.5	1
16.	Management of postoperative pain therapy	C5,C6,C7, D1-D18	6.25	1	1.5	1
	Total				18 marks	24 marks

Weight*= decided according to hours, amounts of information and clinical significance

Lecture Outlines

Lecture (1) Consent

Oxford handbook of Clinical Medicine. (10 edition , P:568,569)

Specific learning Objectives:

By the end of the lecture the student will be able to :

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- 1- Define the time of the consent
- 2- Describe situations for informed written consent

Contents

- 1- For a consent to be valid
- 2- Capacity
- 3- When taking consent
- 4- Special circumstances for consent

Lecture (2) Preoperative care

Oxford handbook of Clinical Medicine. (10 edition , P:566-567)

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Provide diagnostic and prognostic information
- 2- Assess/balance risks of anesthesia, and maximize fitness

Contents:

- 1-Family history
- 2-Drugs
- 3-Preparation

Lecture (3) Preoperative care

Oxford handbook of
Clinical Medicine (10 edition P:566-567)

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Provide diagnostic and prognostic information
- 2- Assess/balance risks of anesthesia, and maximize fitness

Contents:

- 1.History
- 2.Examination
- 3.Tests
- 4.American society of anesthesiologists(ASA) classification

Lecture (4) Airway management

Amboss

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Maintain patent unobstructed airway
 - 2- Know the common instruments used to open obstructed airway
- Contents:**
- 1-Airway anatomy
 - 3-Simple manoeuvres to open the airway
 - 4-Airway adjuncts

Lecture (5) General anesthesia(GA)

Oxford handbook of Clinical Medicine (10 edition P: 572,573)

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Define the basic components of the modern anesthesia machine
 - 2- Define general anesthesia
 3. Manage general anesthesia
- Contents:**
- 1-Definition of GA
 - 2-Induction of GA
 - 3-Maintenance of GA
 - 4-Emergence from anesthesia
 - 5-Post anesthesia care unit(PACU)

Lecture (6)Regional anesthesia(RA) Amboss

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Define the goal, advantages and disadvantages of RA
 - 2- Define the different types of RA
- Contents:**
- 1-Definition of RA
 - 2- Advantages and disadvantages
 - 3-Classification of RA
 - 4-Local anesthetics

Lecture (7) Intraoperative monitoring

Morgan and Mikhail's Clinical anesthesiology 6th edition Specific learning Objectives:

By the end of the lecture the student will be able to :

Be familiar with the different standard intraoperative monitoring techniques and their significance

Contents

Cardiovascular monitoring Arterial

blood pressure

Electrocardiography

Central venous cannulation

Cardiac output

Noncardiovascular

Pulse oximetry

Capnograph

Temperature

Urine output

Peripheral nerve stimulator

**Lecture (8) Basic
life support**

Specific learning Objectives:

By the end of the lecture the student will be able to :

1. Diagnose cardiac arrest
2. Do safe and efficient cardiac massage
3. Perform expired air ventilation

Contents:

1. Diagnosis of cardiac arrest
2. Technique of external cardiac massage
3. Opening the airway
4. Expired air ventilation

Lecture (9) Revision

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1- Recognize the disadvantages of inadequate pain control
- 2- Define the different methods of postoperative pain relief

Contents:

Lecture (10) Intraoperative anesthetic risks

Amboss

Specific learning Objectives:

By the end of the lecture the student will be able to :

Recognize different intraoperative anesthetic risks, Diagnosis and treatment

Contents:

1. Different intraoperative anesthetic risks
2. Diagnosis

3. Treatment of these risks

Lecture (11) Postoperative complications: part I

Oxford handbook of Clinical Medicine (10 edition P: 576,577)

Specific learning Objectives:

By the end of the lecture the student will be able to :

1. Identify all possible postoperative complications
 2. Diagnostic of these complications
 3. Know the principles of treating these complications
- Contents:**
1. Pyrexia
 2. Confusion
 3. Dyspnea or hypoxia

Lecture (12) Postoperative complications: part II

Oxford handbook of Clinical Medicine (10 edition P: 576,577) **Specific learning Objectives:**

By the end of the lecture the student will be able to :

1. Identify all possible postoperative complications
2. Diagnostic of these complications
3. Know the principles of treating these complications

Contents:

1. Hypotension and hypertension
2. Oliguria
3. Sodium
4. Bleeding

Lecture (13) Postoperative pain therapy

Oxford handbook of Clinical Medicine (10 edition P: 574,575)

Specific learning Objectives:

By the end of the lecture the student will be able to :

1. Identify the disadvantages of inadequate pain control
2. Define the different methods of postoperative pain relief

Contents

- 1- Physiological consequences of poor postoperative pain control
- 2- Assessing of acute pain
- 3- Postoperative pain management

Lecture (14) Fluid therapy

Amboss

Specific learning Objectives:

By the end of the lecture the student will be able to : Know
different types of intravenous fluid therapy

Contents:

- 1.Types of fluid therapy
- 2.Complications of fluid therapy

Lecture (15)Oxygen therapy

Amboss

Specific learning Objectives:

By the end of the lecture the student will be able to :

To identify and properly use the different oxygen therapy devices Contents:

1. Indications of oxygen therapy
2. Methods of oxygen therapy
3. Complications of oxygen therapy

Outlines of topics for self directed learning and case based discussions

Case (1) Consent Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.
- 2- Select the appropriate investigations.
- 3- Construct appropriate management algorithm (both diagnostic and therapeutic) for patients with syncope

Case (2)Preoperative history Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation.
- 2- Select the appropriate investigations
- 3- Select the suitable anesthetic technique

Case (3) Preoperative examination

Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Integrate the results of history, physical examination and laboratory test findings into an accurate patient examination
- 2- Select the appropriate investigations.
- 3- Select appropriate anesthetic technique

Case (4) Premedication of a surgical patient

Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

Select the premedication appropriately

Revision

Case (5) Evaluation of the airway

Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

1. Assess the airway preoperatively
2. Familiar with the equipment which should be available for airway management

Case (6) Induction and maintenance of general anesthesia

Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Be familiar with different technique of induction of anesthesia
- 2- Identify How to maintain anesthesia
- 3- Identify Recovery from anesthesia

Revision

Case (7) Spinal anesthesia

Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Select the suitable patients for spinal anesthesia
- 2- Differentiate between spinal and epidural anesthesia
- 3- Identify How to maintain safe spinal anesthesia

Case (8) Local anesthetic overdose

Handout

Specific learning Objectives:

By the end of the lecture the student will be able to :

- 1. Be familiar with the different types of local anesthetics**
- 2. To know the safe doses of local anesthetics**
- 3. Identify Diagnosis of local anesthetic toxicity**

Case (9) Cardiac arrest Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Diagnose cardiac arrest
- 2- How to perform safe and efficient basic life support
- 3- Know the role do defibrillator
- 4- Be familiar with the essential drugs for advanced cardiac support

Case (10) Hemodynamic monitoring and management of hemodynamic instability Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Know the standard intraoperative hemodynamic monitors

Case (11) Intraoperative hypothermia Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Define and diagnose of hypothermia
- 2- To know the risks of intraoperative hypothermia
- 3- Identify Patients liable to intraoperative hypothermia
- 4- Identify how to prevent intraoperative hypothermia

Case (12) Aspiration pneumonia Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Identify patients at risk of aspiration pneumonia
- 2- Identify How to diagnose intraoperative aspiration
- 3- Identify How to prevent this complication

**Case (13) Delayed recovery from general anesthesia
Handout**

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Define delayed recovery from general anesthesia
- 2- Identify the different causes of such problem
- 3- Diagnose and manage such problem

Case (14) Postoperative pain Handout

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Identify the hazard of postoperative pain
- 2- Identify how to relieve this pain safely

**Case (15) Respiratory failure in the recovery room
Handout**

Specific learning Objectives: By the end of the

lecture the student will be able to :

- 1- Identify patients liable to postoperative respiratory failure
- 2- Diagnose this problem
- 3- Manage the problem

**Case(16)Central anticholinergic syndrome
Handout**

Specific learning Objectives:

By the end of the lecture the student will be able to :

1. Identify patients at such risk
2. Manage these patients