
INTERESTING CASE

R1 สรिता จินาวงศ์

อ. วิริยะ หอมหวล

CASE

- **Case : A Thai male 11 month old**
 - **Diagnosis : Near amputation of right ring finger**
 - **Operation : Suture wound with debridement of right ring finger**
-

➤ Chief complaint : มีแผลที่นิ้วนาง
ขวา 5 นาที ก่อนมาโรงพยาบาล

R1 HISTORY

PATIENT'S HISTORY

- Present illness : 5 นาที ก่อน มารพ มารดาผู้ป่วยให้ประวัติว่า ขณะเล่นที่สนามเด็กเล่น ผู้ป่วยนำนิ้วไปวางบริเวณโซ่ล้อจักรยาน แล้วมีเด็กบริเวณนั้นปั่นจักรยาน ทำให้มีแผลที่นิ้วนาง เกือบขาด มารดาจึงรีบพาส่งรพ
- Npo time 16:00 : infant formula

PAST HISTORY



Underlying diseases : None



Current medication : No

PAST HISTORY



No food and drug allergy



No history of surgery

PAST HISTORY

- **Preterm GA 35 +6 week cesarean section due to preeclampsia with severe feature, BW 2,750 g, APGAR 8,9 AGA**
- **Vaccination: As scheduled**



R1 PHYSICAL EXAMINATION

PHYSICAL EXAMINATION

- **Vital signs : BT 36 C, PR 120 bpm, RR 30/ min, BP 124/63 mmHg**
 - **GA : Alert, active, crying**
 - **BW : 8.6 kg., Height 74 cm.**
 - **HEENT : mild dry lips, not pale conjunctivae, anicteric sclerae**
-

PHYSICAL EXAMINATION

- **Lung : Normal breath sound both lung, no adventitious sound**
- **CVS : Pulse full and regular, Normal S₁, S₂, no murmur**
- **Abdomen : soft, not tender**

PHYSICAL EXAMINATION



Extremities: circumferential traumatic laceration wound at right ring finger(near amputation)



R1 INVESTIGATIONS

INVESTIGATION



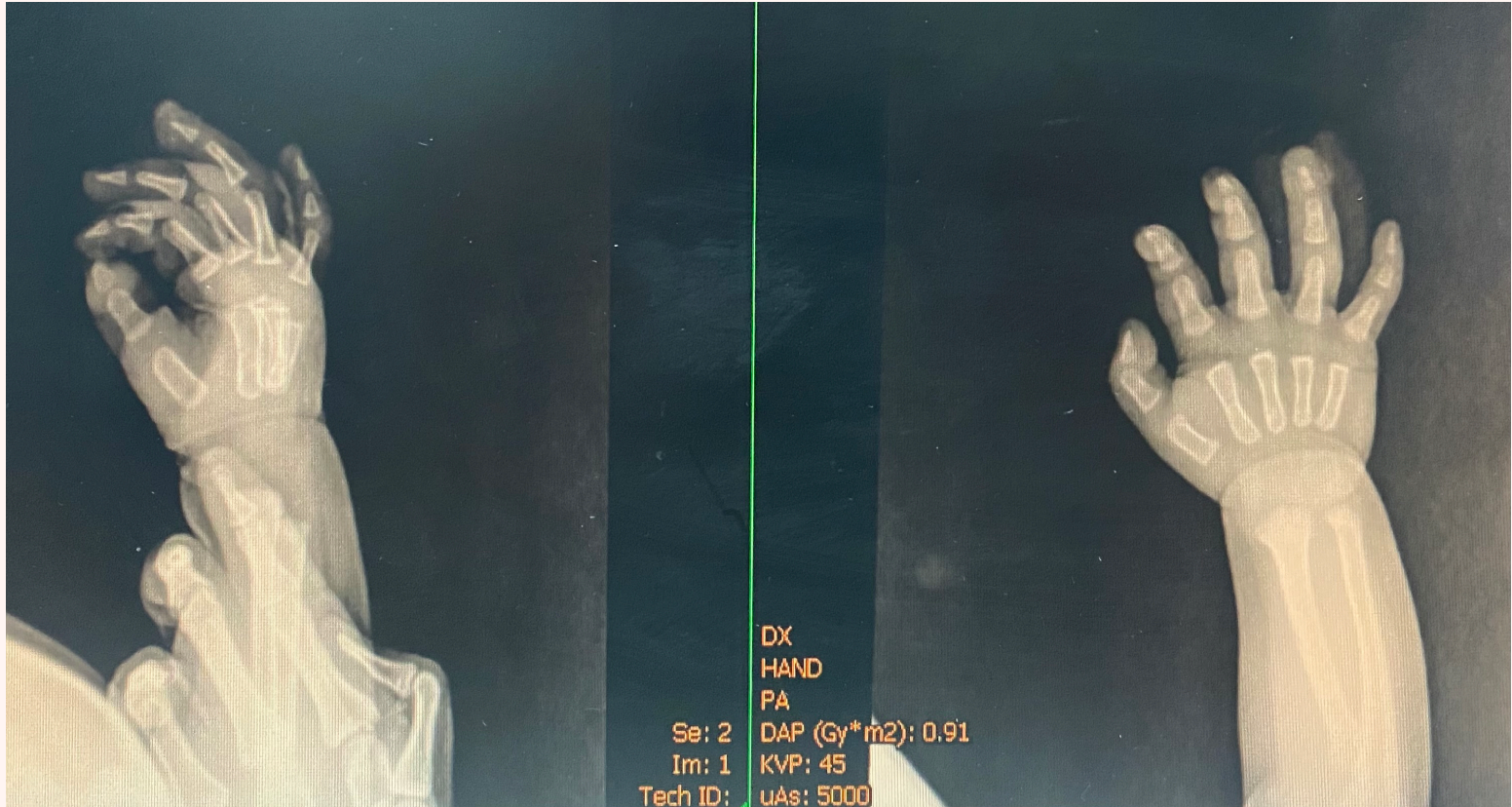
Hct 40%



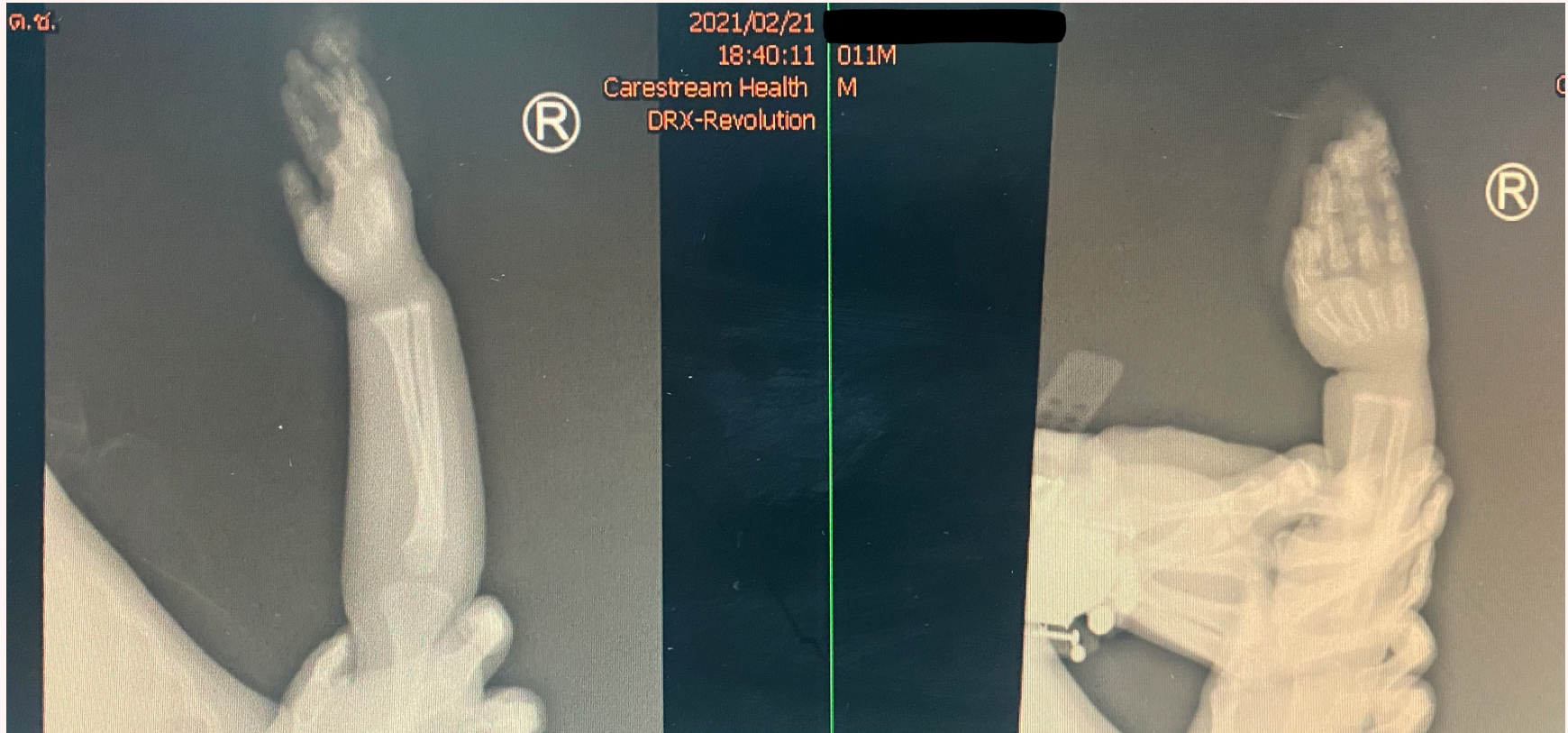
SARS- CoV-2 Ag : Negative



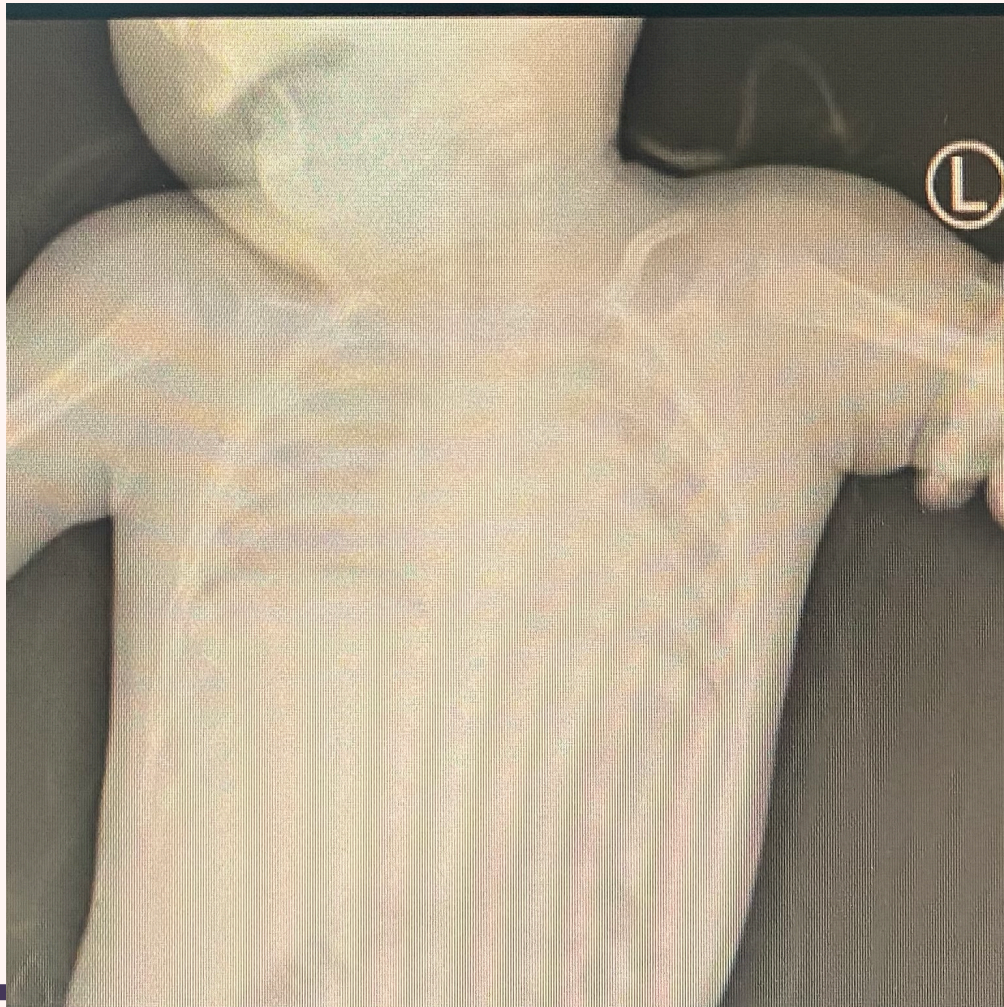
FILM RT HAND OBLIQUE & AP



FILM RT HAND LATERAL



CXR



R1
PROBLEM LIST & ASA
CLASSIFICATION

PROBLEM LIST

➤ **Near amputation of right ring finger**

➤ **Pediatric**

➤ **Full stomach**

ASA CLASSIFICATIONS



ASA class I E



R2
PREOPERATIVE
EVALUATION

PATIENT FACTORS

Physiologic change in pediatric

Full stomach

PHYSIOLOGIC CHANGE IN PEDIATRIC

PHYSIOLOGIC CHANGE IN PEDIATRICS

- **CVS**
 - **Airway and ventilation**
 - **GI**
 - **Kidney**
 - **Liver**
 - **Thermoregulation**
-

CVS

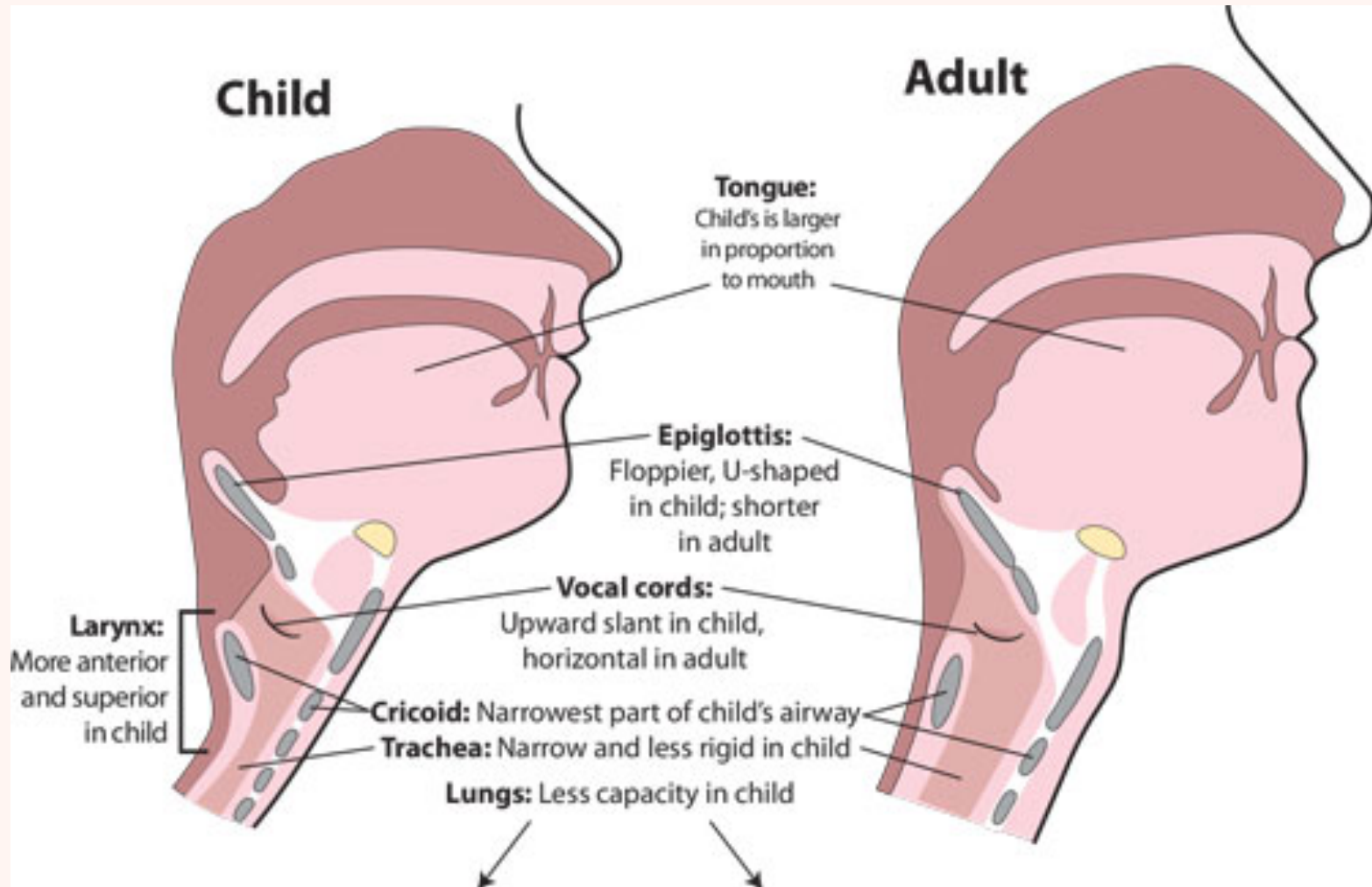
- **Transitional circulation**
 - **Less developed myocardial structure**
 - **Cardiac output is strongly dependent on heart rate**
 - **Hypoxia-induced bradycardia => asystole**
-

AIRWAY

Differences in airway anatomy from adults in five ways :

- 1) The large size of the infant's tongue compared to oropharynx.**
 - 2) The larynx is located higher in the neck**
 - 3) The epiglottis : short, stubby, omega shaped, and angled**
 - 4) The vocal cords are angled; blindly passed tracheal tube**
 - 5) The infant larynx is funnel shaped, the narrowest portion is at the cricoid cartilage.**
-

AIRWAY



VENTILATION

- **The chest wall : highly compliant => negative intrathoracic pressure is poorly maintained.**
 - **The small diameter of the airways increases resistance to airflow.**
 - **Oxygen consumption is 2-3 times higher than adult**
 - **The diaphragmatic and intercostal muscles do not achieve the adult configuration of type I muscle fibers until the child is approximately 2 years old.**
-

GI

- **At birth, gastric pH is alkalotic**
 - **At DOL 2, pH is in the normal physiologic range for older children.**
 - **Coordination between swallowing & respiration=> not mature until 4 to 5 months of age => GERD**
 - **GI developmental problem => occur within 24 - 36 hours**
 - **Upper intestinal abnormalities : vomiting and regurgitation.**
 - **Low intestinal abnormalities : abdominal distention and a failure to pass meconium.**
-

KIDNEY

- **Renal function is diminished in neonates => lower renal perfusion pressures and immature glomerular and tubular function.**
 - **Maturation of glomerular filtration and tubular function is nearly complete by 20 weeks after birth**
 - **Complete maturation of renal function occurs at approximately 2 years of age.**
-

LIVER

- **At term, the functional maturity of the liver is incomplete.**
 - **The ability to metabolize medications rapidly increases for two reasons:**
 - **(1) hepatic blood flow increases and hence more drug is delivered to the liver**
 - **(2) the enzyme systems develop and are induced.**
-

LIVER

- **The ability to metabolize : depend on specific cytochromes**
 - **Cytochrome P450 reaches 50% of adult levels at birth. The capacity for drug metabolism is reduced.**
 - **CYP3A is generally present at adult values at birth, whereas other cytochromes are absent or reduced.**
 - **Phase II metabolism are often impaired in neonates and result in jaundice and long drug half-lives**
 - **Plasma levels of albumin and other proteins are lower in newborns => less protein binding => greater levels of unbound drug**
-

THERMOREGULATION

- **Vulnerable to hypothermia : large ratio of body surface area to weight, the thinness of the skin, and a limited ability to cope with cold stress**
 - **Cold stress : increased oxygen consumption and metabolic acidosis**
 - **Preterm infants : even thinner skin and limited fat stores**
 - **The infant compensates by shivering and nonshivering thermogenesis (metabolism of brown fat)**
-

FULL STOMACH

TABLE 15-11 Ingested Material Minimum Fasting Periods

<u>Ingested Material</u>	<u>NPO Time (Hours)</u>
Clear liquids	2
Breast milk	4
Infant formula	6
Nonhuman milk	6
Light meal	6
Heavy meal (fried or fatty food)	8

R2

PREPARATION AND PREMEDITATION

PREPARATION

- **Informed consent**
 - **NPO**
 - **Consult pediatrician**
 - **Warm bed and blanket & forced air warmer**
 - **Warm IV fluid**
 - **Pediatric airway equipment/ difficult airway equipment**
 - **Laryngoscopic blade (Miller blade) no. 0,1**
 - **ETT uncuffed no. 3.5,4 , Suction No 6,7**
 - **Mask no. 0,1, Oral airway no. 40,50 mm**
-

PREPARATION

- **5% DN/3 500 ml IV rate 40 ml/hr (Maintenance rate)**
 - **Cefazolin 2 g ไป OR**
 - **Pediatric monitoring equipments**
 - **Pediatric drugs dosing and preparations**
 - **Hct**
 - **CXR**
 - **Film right hand AP, oblique & lateral**
 - **Postoperative กลับ ward กม 6**
-

CHOICE OF ANESTHESIA

CHOICE OF ANESTHESIA



GA with ETT with RSI with controlled ventilation



R3
ANESTHETIC
CONSIDERATIONS

ANESTHETIC CONSIDERATIONS

- **Pediatric consideration**
- **Full stomach**
- **Prevent heat loss**
- **Time to revascularization**
- **Tourniquet**

ANESTHETIC AGENTS

- **Induction**
 - **Intubation**
 - **Opioids**
 - **Muscle relaxants**
 - **Reversing agents**
-

INDUCTION



Gas induction



Iv anesthetic agent



IV ANESTHETIC AGENTS

- **Thiopental**
 - **Propofol**
 - **Ketamine**
 - **Benzodiazepines**
 - **Etomidate**
-

OPIOIDS

<p>➤ Fentanyl</p>	<p>➤ Intraoperative analgesia</p> <p>➤ Greater hemodynamic stability</p> <p>➤ The clearance is reduced in preterm but rises to 80% of adult values by term</p>
<p>➤ Morphine</p>	<p>➤ Postoperative analgesia</p> <p>➤ Clearance is low in neonates</p> <p>➤ Susceptible to respiratory depression</p>
<p>➤ Meperidine</p>	<p>➤ The use is declining => accumulation of the metabolite normeperidine => seizures.</p> <p>➤ Potency 1/10 morphine and a shorter time to peak effect.</p> <p>➤ The elimination is reduced in neonates.</p>

VOLATILE

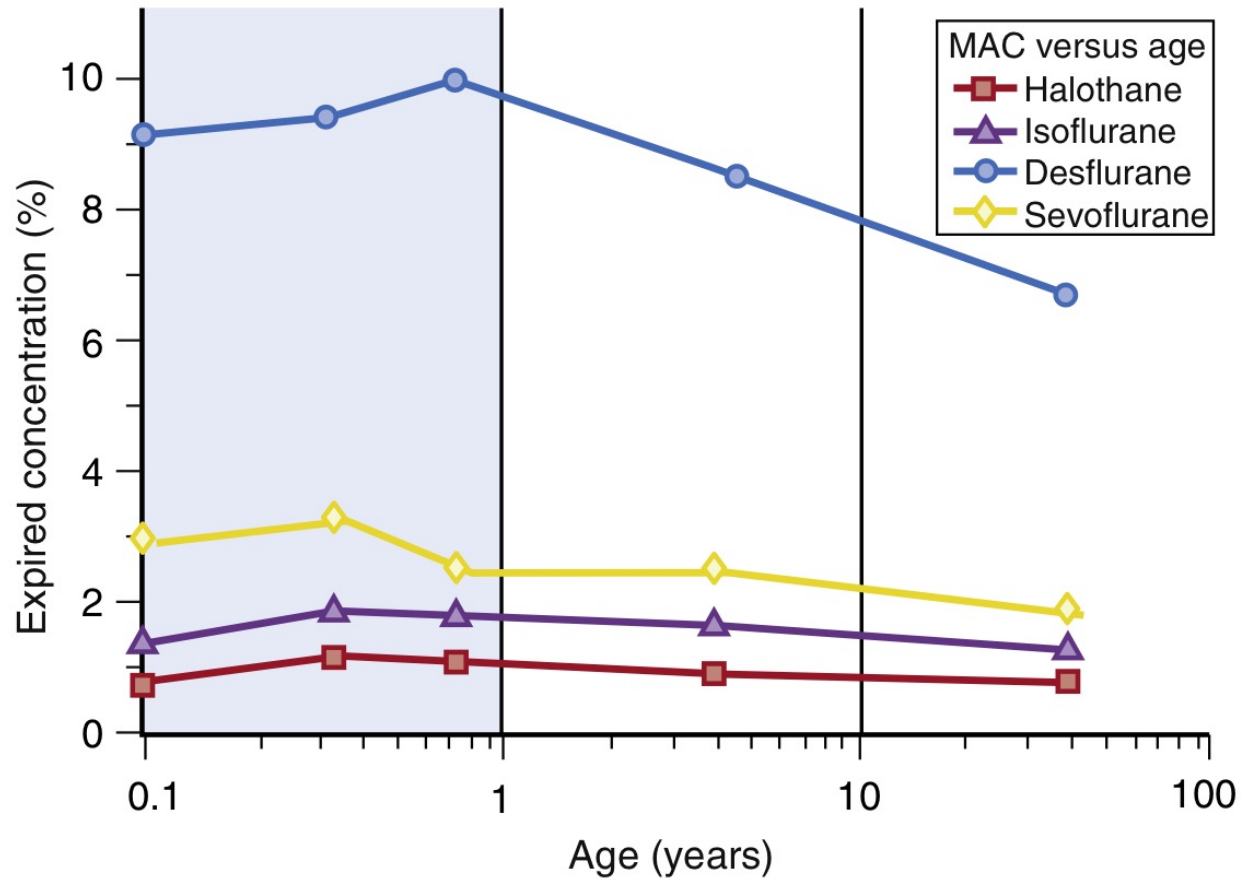


Fig. 77.8 The minimum alveolar concentrations (MACs) of four commonly used inhaled anesthetics are plotted versus age. (From references 37–44.)

MUSCLE RELAXANTS

TABLE 12-7 Intubation and Maintenance Doses (mg/kg) of NMBAs in Infants and Children

	Intubation Dose*	Maintenance
Succinylcholine	1–2	—
Cisatracurium	0.1–0.2	0.02–0.05
Vecuronium	0.05–0.1	0.02
Rocuronium	0.3–1.0 [†]	0.1
Pancuronium	0.08–0.1	0.02

REVERSING AGENTS

- **Atropine 0.02 mg/kg (Minimum 0.1 mg)**
- **Neostigmine 0.02 -0.06mg/kg**
- **Sugammadex 2-4 mg/kg to 16 mg/kg**

EMERGENCE

- **Grimacing, which includes the eyebrows and/or the forehead**
 - **Spontaneous eye opening**
 - **Purposeful movement, such as reaching for the endotracheal tube**
 - **Nonparadoxical breathing**
 - **Negative inspiratory pressure generation greater than 30 cm H₂O**
 - **Hip flexion, with leg elevation, for 10 seconds**
 - **Head lift for 10 seconds**
-

FLUID : HOLIDAY SAGAR

Weight(kg)	Fluid per hour(ml/hr)
< 10	4
11-20	2
>20	1



PREVENT HEAT LOSS

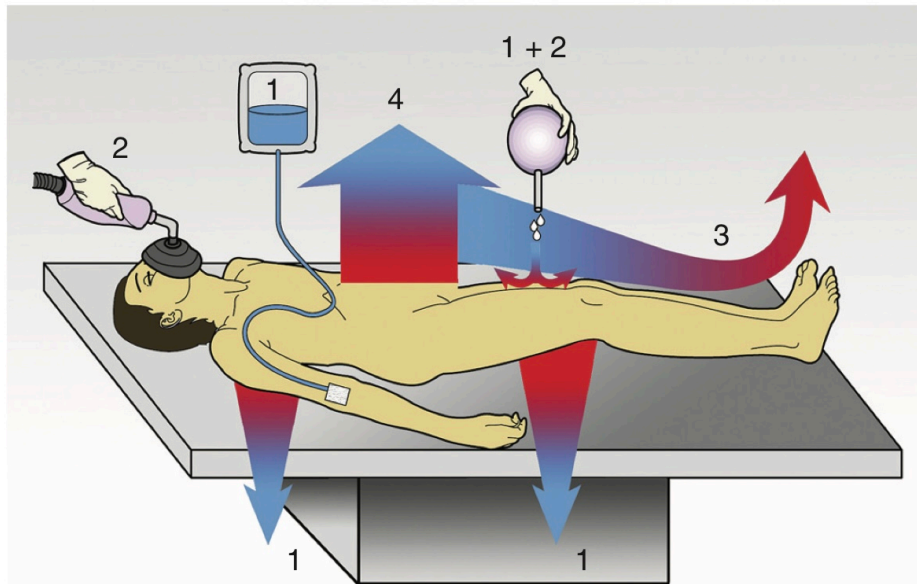


FIG 6-3 The Four Mechanisms Contributing to Perioperative Hypothermia. (1) Conduction, (2) evaporation, (3) convection, and (4) radiation. (Modified from Gurtner C, Paul O, Bissonnette B: Temperature regulation: Physiology and pharmacology. In: Bissonnette B, Dalens B, eds. *Pediatric anesthesia: Principles and practice*, New York: McGraw-Hill; 2002.)

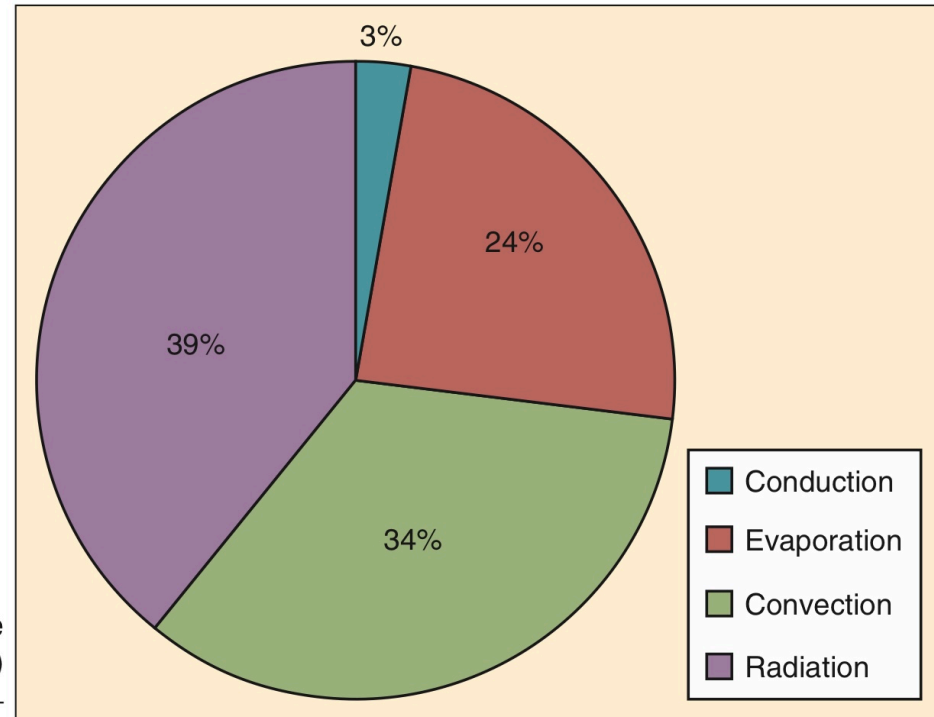


FIG 6-2 Contributions of Each Mechanism to Total Heat Loss (in %) for a Neonate in a Thermoneutral Environment (Approximately 32° to 34° C, Draft-Free).

INDICATION TO REPLANTATION

Primary indications

- **thumb at any level**
- **multiple digits**
- **through the palm**
- **wrist level or proximal to wrist**
- **almost all parts in children**

Relative indications

- **individual digits distal to the insertion of flexor digitorum superficialis [FDS] (Zone I)**
 - **ring avulsion**
 - **through or above elbow**
-

TIME TO REPLANTATION

Proximal to carpus

- **warm ischemia time < 6 hours**
- **cold ischemia time < 12 hours**

Distal to carpus (digit)

- **warm ischemia time < 12 hours**
 - **cold ischemia time < 24 hours**
-

TOURNIQUET

- **Provide a dry operative field and limit intraoperative blood loss during extremity surgery**
 - **3 basic components: an inflated cuff, a compressed gas source, and a mechanism with a pressure device**
 - **The cuff should be inflated to the lowest inflation pressure**
 - **Limb occlusion pressure (LOP) :**
 - **75 mmHg for lower-extremity**
 - **50 mmHg for upper-extremity**
-

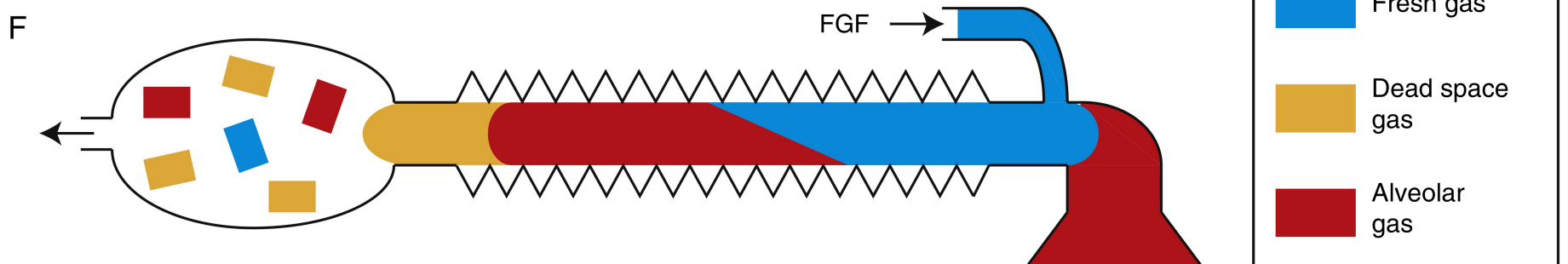
TOURNIQUET

- **Applied over smooth padding and inflated.**
- **Width greater than 1/2 of the limb's diameter**



JACKSON-REES CIRCUIT

- Spontaneous or assisted/controlled ventilation
- Lightweight, convenient, and potentially reusable (if sterilized)
- Low resistance work of breathing
- Fresh gas flows required to prevent rebreathing :
 - 2.5 to 3 times minute volume for spontaneous breathing
 - 1.5 to 2 times minute volume for controlled ventilation



INTRAOPERATIVE MANAGEMENT

- Choice of anesthesia : GA with ETT with RSI with controlled ventilation**
- Monitoring : NIBP, EKG, O2 sat,ETCO2,BT**
- Position supine**



INTRA OPERATIVE MANAGEMENT

Ward ER → nars 6	Code: 130-016	Op. No. (E)	PRE-Medication																
Anesthetic technique GA C E T T	Service ortho	Monitoring: NIBP, O ₂ Sat, EKG, ETCO ₂ , A-line, CVP, PAP, TEMP																	
Remark EPS = 10 N ₂ O		Other Force air warmer	ROOM No. Tv 2																
AGENTS/TIME	9:00	9:10	9:20	9:30	9:40	9:50	10:00	10:10	10:20	10:30	10:40	10:50	11:00	11:10	11:20	11:30	11:40	11:50	12:00
N ₂ O	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
O ₂	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Sevo Fluorane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fentanyl	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rimbex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N ₂ S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5% DN/3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O ₂ sat	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98
IV FLUID INTAKE	In 20:30	16																	
120	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
C	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
mmHg	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
EKG	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
AP	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140	140
120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
URINE																			
BLOOD																			
FLUID	5-DNR 13	27	450	ml															
IV. CATH. NO.	24	24	24	SIT	LL, RL														
PRECURARIZATION		mg																	
INDUCTION AGENT Thiopental	50	mg																	
INTUBATION AGENT Saccharylcholine	15	mg																	
IN TUBATION AGENT N ₂ O:O ₂ 1:1	Sevoflurane	2	mg																
M. RELAXANT Rimbex	1	mg																	
SEDATIVE		mg																	
ANALGESIC Fentanyl	15	mcg																	
REVERSE Neostigmine	0.5	mg																	
	Atropine	0.2	mg																
CONSENT																			
PRE-OP VISIT																			
POSITION																			
LAB																			
TOTAL URINE OUTPUT																			
TREATMENT																			
ANEST LEVEL	PRE-OP																		
BABY DELIVERED TIME																			

IN OR 20:30

Monitoring: NIBP, EKG, O₂ sat, ETCO₂, BT

- **IV fluid NO. 24 RH(off), 24LHxII(in or)**
- **5%DN/3 ยกมา 450 ml**
- **V/S : BP 120/60 mmHg, PR 141 bpm, 35 /min, O₂ sat 98% <RA>**
- **Position: Supine**

INTRA OPERATIVE MANAGEMENT

Ward ER → nars 6	Code: 110-104	Op. No. (E)	PRE-Medication
Anesthetic technique GA C ET	Service ortho	Monitoring: NIBP, O ₂ Sat, EKG, ETCO ₂ , A-line, CVP, PAP, TEMP	
Remark EPS = 10 N ₂ O		Other Force air warmer	ROOM No. Tv 2
AGENTS/TIME		CONSENT	
N ₂ O	9:00	<input checked="" type="checkbox"/> YES	
O ₂		<input type="checkbox"/> NO	
Sevo Fluorane		PRE - OP VISIT	
Fentanyl		<input checked="" type="checkbox"/> YES	
Nimbex		<input type="checkbox"/> NO	
NBS		POSITION	
SR-DINIS		<input checked="" type="checkbox"/> SUPINE	
O ₂ sat 98.7		<input type="checkbox"/> PRONE	
IV FLUID INTAKE		<input type="checkbox"/> LITHOTOMY	
In @ 20:50		<input type="checkbox"/> SITTING	
120		<input type="checkbox"/> TRENDEL	
60		<input type="checkbox"/> Rt. LATERAL	
38		<input type="checkbox"/> Lt. LATERAL	
220		<input type="checkbox"/> JACK-KNIFE	
200		<input type="checkbox"/> OTHER	
36		LAB	
34		<input type="checkbox"/> Hct	
180		<input type="checkbox"/> Blood Sugar	
160		<input type="checkbox"/> Electrolyte	
140		<input type="checkbox"/> ABG	
120		TOTAL URINE	
100		OUTPUT - ml	
80			
60			
40			
20			
URINE			
BLOOD			
FLUID	5-DINIS 8ml, 27 450 ml	IV. CATH. NO. 24, 24 SITE LLL, RL	
PRECURARIZATION		TREATMENT	
INDUCTION AGENT Thiopental 50		① cefazolin 250 mg @ after test	
INTUBATION AGENT Sacchylcholine 15		dose @ 21.15 min at 21.15	
IN% TION AGENT N ₂ O: O ₂ 1:1, Sevoflurane 2		② on s/a 1 mg IV.	
M. RELAXANT Nimbex 1			
SEDATIVE		ANEST LEVEL: PRE - OP	
ANALGESIC Fentanyl 15 mcg		POST - OP	
REVERSE Neostigmine 0.5 mg, Atropine 0.2		BABY DELIVERED TIME	
		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	

ET at 20:50

- ET uncuffed no. 4.0, depth 12 cms (2 attempts)
- LV grade 1 with stylet
- Induction agent: Thiopental 50 mg
- Intubation : SCH 15 mg
- Inhalation : N₂O: O₂ 1:1, sevoflurane up to 2%
- Nimbex 1 mg at 20:50

INTRA OPERATIVE MANAGEMENT

Ward ER → NARS 6	Code 1156526	Op. No. 193 1111 13	PRE-Medication
Anesthetic technique GA C ETI	Service ortho	Monitoring: NIBP, O ₂ Sat, EKG, ETCO ₂ , A-line, CVP, PAP, TEMP	Other Force air warmey
Remark FFS = 10 N:MMAL		ROOM No. 122	
AGENTS/TIME			CONSENT
N ₂ O			<input checked="" type="checkbox"/> YES
O ₂			<input type="checkbox"/> NO
Sevoflurane	mg		PRE - OP VISIT
Fentanyl	mg		<input checked="" type="checkbox"/> YES
Nimbex	mg		<input type="checkbox"/> NO
N ₂ S	ml		POSITION
67-D/N/3	ml		<input checked="" type="checkbox"/> SUPINE
O ₂ Sat			<input type="checkbox"/> PRONE
IV FLUID INTAKE			<input type="checkbox"/> LITHOTOMY
In OK 20:30 16			<input type="checkbox"/> SITTING
19:00			<input type="checkbox"/> TRENDEL
C 240			<input type="checkbox"/> Rt. LATERAL
mmHg 220			<input type="checkbox"/> Lt. LATERAL
PULSE 38			<input type="checkbox"/> JACK-KNIFE
60pm			<input type="checkbox"/> OTHER
START ANES 34			LAB
START 32			<input type="checkbox"/> Hct
END ANES 30			<input type="checkbox"/> Blood Sugar
TEMP 28			<input type="checkbox"/> Electrolyte
			<input type="checkbox"/> ABG
URINE			TOTAL URINE
BLOOD			OUTPUT ml
FLUID	500ml 3 80ml 450 ml	IV. CATH. NO. 24, 24 SITE LL, RL	
PRECURARIZATION	mg	<input type="checkbox"/> EPIDURAL <input type="checkbox"/> SPINAL <input type="checkbox"/> OTHER	TREATMENT
INDUCTION AGENT Thiopental 50	mg		① cefazolin 250 mg e, after test
INTUBATION AGENT Succinylcholine 15	mg	SITE NEEDLE	dose e 5ml 7ml time at 21:15
IN TION AGENT N ₂ O:O ₂ 1:1 sevoflurane 2	%	ATTEMPT BY	② onsia 1 mg IV.
M. RELAXANT Nimbex 1	mg	DRUG	
SEDATIVE	mg	ANEST LEVEL: PRE - OP	
ANALGESIC Fentanyl 15 mcg	mg	POST - OP	
REVERSE Neostigmine 0.5 mg Atropine 0.2	mg	BABY DELIVERED TIME	
		<input type="checkbox"/> MALE <input type="checkbox"/> FEMALE	

**At 21:05 : on
tourniquet at Right
arm**

**Fentanyl 10 mcg at
21:10**

**At 21:15 : start
operation**

INTRA OPERATIVE MANAGEMENT

Ward ER → NARS 6	Code 115656	Op. No. 193 1111	PRE-Medication
Anesthetic technique GA C ETI	Service ortho	Monitoring: NIBP, O ₂ Sat, EKG, ETCO ₂ , A-line, CVP, PAP, TEMP	Other Force air warmey
Remark FPS = 10 N:MMAL		ROOM No. 12	
AGENTS/TIME	20:30	21:00	21:35
N ₂ O	1	1	1
O ₂	1	1	1
Sevoflurane	2	3	3
Fentanyl	mg	mg	mg
Nimbex	mg	mg	mg
N ₂ S	m	50	50
G.D/N/3	ah	100	100
O ₂ sat	98	100	100
IV FLUID INTAKE	In OK 20:30 16	N ₂ S 25	ml N ₂ S
19:00	240	220	200
C mmHg	38	38	36
PULSE	162	162	162
START ANES	34	32	30
START	30	28	26
END ANES	24	22	20
TEMP	36	36	36
URINE BLOOD			
FLUID	500ml 300ml 450ml		
PRECURARIZATION			
INDUCTION AGENT Thiopental 50	mg		
INTUBATION AGENT Succinylcholine 15	mg		
INFLATION AGENT N ₂ O:O ₂ 1:1 sevoflurane 2	%		
M. RELAXANT Nimbex 1	mg		
SEDATIVE			
ANALGESIC Fentanyl 15 mcg	mg		
REVERSE Neostigmine 0.5 mg Atropine 0.2	mg		
EPIDURAL			
SPINAL			
OTHER			
TREATMENT			
1) cefazolin 250 mg e, after test dose e 5ml 7M time at 21:15			
2) onsia 1 mg IV			

At 21:35 : off tourniquet -> Total 35 min

Total nimbex 1 mg , fentanyl 15 mcg

Onsia 1 mg at 21:35

Reversing agents :

1. Atropine 1.2 mg

2. Neostigmine 0.5 mg

At 22:00 : off Et & transfer to PACU

Operation time 1 hr 30 min

Blood loss : minimal

Intake : 100 ml

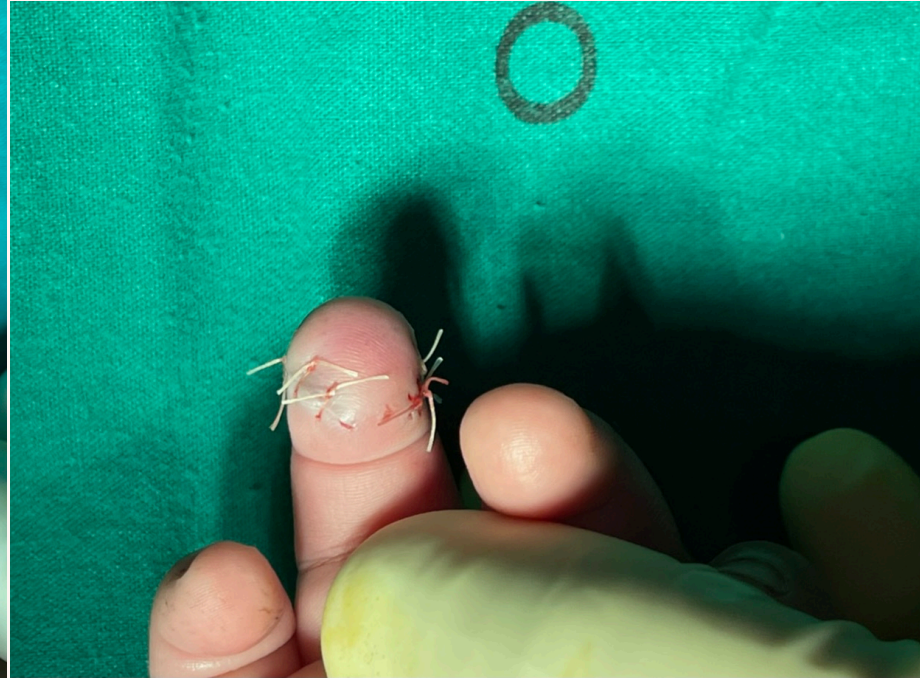


POST OP D1

- **S:** ตื่นดี ไม่มีไข้ ทานโจ๊กได้ดี ไม่มีคลื่นไส้ อาเจียน หายใจปกติ ไม่ปวดแผล PS 0/10 ปัสสาวะเหลืองใส ชั้ถ่ายได้ดี ไม่มีbleedซึมที่แผล
 - **O:** V/S BP 106/58 mmHg, PR 128 bpm, RR 24 /min, BT 37.2 C
 - **A:** Open fracture tip of distal phalange of right ring finger
 - **P:**
 - 5%DN/3 1,000 ml IV rate 20 ml/hr
 - Fentanyl 10 mcg IV prn for pain q 6 hr(1 mcg/kg/dose)
 - Cefazolin 250 mg IV q 6 hr (100 mg/day)
 - Step diet : liquid diet
 - Paracetamol syrup (120 mg/tsp) 1 tsp po q 4 hr
-

POST OP D2

- **S:** ตื่นดี ไม่มีไข้ ทานโจ๊กได้ดี ไม่มีคลื่นไส้ อาเจียน หายใจปกติ ไม่ปวดแผล PS 0/10 ปัสสาวะเหลืองใส ชับถ่ายได้ดี แผลดี มีbleedซึมเล็กน้อย
 - **O:** V/S BP 98/65 mmHg, PR 120 bpm, RR 30 /min, BT 36.7 C
 - **A:** Open fracture tip of distal phalange of right ring finger
 - **P:** - off IV
 - - D/C
 - **HM:** Paracetamol syrup (120 mg/tsp) 1 tsp po q 4 hr
 - Cephalexin (125mg/tsp) 1 tsp po qid x 2 weeks
 - **F/U OPD Ortho 1 week + film Rt hand AP**
-



THANK YOU
