



PROCEEDINGS BOOK

DUTCH FOUNDATION
FOR POSTGRADUATE MEDICAL COURSES
IN INDONESIA 2019

THE CONTINUUM OF CARE IN PRE ECLAMPSIA MOTHER INFANT CHILD

UNIVERSITAS AIRLANGGA
FACULTY OF MEDICINE
Surabaya, April 8th - 9th 2019

**THE CONTINUUM OF CARE
IN PRE ECLAMPSIA MOTHER INFANT CHILD**

Penulis:

Agus Harianto, dr., SpA(K)

Divisi Neonatologi

Dr. Risa Etika, dr., SpA(K)

Divisi Neonatologi

Dr. Ahmad Suryawan, dr., SpA(K)

Divisi Tumbuh Kembang Pediatri Sosial

Prof. Dr. Erry Gumilar, dr., SpOG(K)

Divisi Fetomaternal

Dr. Ernawati Darmawan, dr., SpOG(K)

Divisi Fetomaternal

Muhammad Aldika Akbar, dr., SpOG(K)

Divisi Fetomaternal

Dr. S.M. Mei Wulan, dr., SpKFR(K)

Divisi Pediatri

Cetakan I: April 2019

ISBN: 978-602-5758-55-3

ISBN 978-602-5758-55-3



Penerbit

CV Saga Jawadwipa

PUSTAKA SAGA

Jl. Kedinding Lor, Gg. Delima, no 4A. Kenjeran, Surabaya
Email: saga.penerbit@gmail.com, HP: +62 856 5539 6657

Hak cipta dilindungi oleh undang-undang.
Dilarang memperbanyak sebagian atau seluruh
isi buku ini tanpa izin tertulis dari penerbit

DAFTAR ISI

KATA PENGANTAR | III

**DUTCH FOUNDATION FOR POSTGRADUATE
MEDICAL COURSES IN INDONESIA | V**

SUSUNAN PANITIA |VII

DAFTAR PEMBICARA | X

DAFTAR PENULIS | XII

DAFTAR ISI | XIII

1. *Peripartum Cardiomyopathy Related To Preeclampsia : Significant Overlap Between These Pregnancy Developing Complications* / 1
Erry Gumilar D
2. *Expectant Management of preterm preeclampsia in developing country, maternal outcomes, and perinatal survival* / 14
Ernawati
3. *The Hypertension in Pregnancy Problems in Indonesia* / 26
Muhammad Ilham Aldika Akbar
4. *Neonatal Respiratory Outcome in pregnancy induced hypertension* / 35
Agus Harianto

5. *Prevention and Management IUGR as
Complication of Pregnancy Induced
Hypertension* | 61
Risa Etika
6. *Long-term Developmental Outcome in Preterm
Infants born with Preeclampsia* | 87
Ahmad Suryawan
7. *The Role of Physical Medicine and
Rehabilitation in Improving Neonatal
Respiratory Outcome* | 95
S.M. Mei Wulan

Prevention and Management IUGR as Complication of Pregnancy Induced Hypertension

*Risa Etika, Agus Harianto, Martono TU, Dina Angelika,
Kartika DH, Mahendra TAS*

*Division of Neonatology, Department of Pediatrics
Faculty of Medicine Universitas Airlangga – Dr. Soetomo
General Hospital Surabaya*

Nobility of Professions

Medical Science is the noblest science and only certain people who are able to uphold the honor of himself and his profession worthy of being a doctor (Hippocrates)

Background

MDGs 2015 point 4 assigned the newborn mortality rate of 25/1000 live births. The Indonesian Doctor Competency Standard 2012 reported the 3 most common causes of death of newborns, asphyxia (36%), LBW / Prematurity (32%) and septicemia (12%). IUGR infants is a newborn infant in fetal life experience failure to achieve its growth potential which manifests deviation of the growth pattern of the fetus. Most babies IUGR Small Gestational Age once LBW, can be born prematurely or at term. Perinatal morbidity and mortality of IUGR infants 7-8 times higher than normal babies.

The quality of life of IUGR infants in the era of SDGs 2016-2030 include efforts to update knowledge IUGR, tools and provision of human resources skilled in resuscitation

and stabilization of IUGR infants for the achievement of neonatal intact survival, spared from disability caused by IUGR and following the 1000 The First Day of Life program.

IUGR infants gravity which include asphyxia, prematurity, infection, hypoglycemia, hypothermia, hyperbilirubinemia, polycythemia, hypocalcemia, seizures, etc. strived to update the management of Neonatal Care level 2 and 3, exclusive breastfeeding and Kangaroo Care, Fenton chart for IUGR infant growth monitoring, preventing extra uterine growth disorders, prevent neonatal septicemia and implement programs such as Decrease Maternal Mortality Infant Surabaya, mother field Maternity Hospital Room Network Surabaya and newborns field through NETSS program (Neonatal Emergency Transport Service Surabaya).

Aim of this topics is to observe the role of pediatricians in improving the quality of life of IUGR infants, beacuse The quality of life of IUGR infants is pursued by management including knowledge of IUGR update, availability of equipment and team of health personnel Neonatal care level 2 and level 3 in hospitals adept at resuscitation and stabilization of IUGR infants as well as in-utero referral or IUGR infant referral who have emergency if the hospital is not available Neonatal Level 3 service.



Figure 1. MDGs 2015 (www.plannemotes.blogspot.com)



Figure 2. SDGs 2015 (www.un.org)

1000 hari pertama kehidupan

adalah

masa sejak anak dalam kandungan hingga seorang anak berusia dua tahun



disebut sebagai masa **PERIODE EMAS**



Karena pada periode ini terjadi **PERTUMBUHAN OTAK**

yang sangat pesat, yang mendukung seluruh proses pertumbuhan anak dengan sempurna.

HARUS DIDUKUNG GIZI



Apa yang terjadi jika anak **KURANG GIZI?**

Karena kurang gizi pada 1000 Hari Pertama Kehidupan **TIDAK DAPAT DIPERBAIKI** dimasa kehidupan selanjutnya.

- Pertumbuhan otak terhambat, anak **TIDAK CERDAS**
- Pertumbuhan jasmani dan perkembangan kemampuan anak terhambat, dan anak menjadi **PENDEK**



- Anak menjadi **LEMAH & MUDAH SAKIT**



- Anak akan **SULIT MENGIKUTI PELAJARAN** saat bersekolah nantinya



Setelah dewasa akan sulit mendapatkan pekerjaan



Figure 3. 1000 First Days of Life (www.slideshare.net)

Aspects of IUGR

1. Definition

IUGR babies are newborn babies who failed to achieve their growth potential during fetal period, manifesting as deviation in the pattern of fetal growth. Most IUGR babies also manifest as small gestational age (SGA) and low birth

weight (LBW) babies. They could be born both prematurely or at term. Perinatal morbidity and mortality among IUGR babies are 7-8 times higher than normal babies.

2. Causes

Maternal factors :

Preeclampsia / eclampsia

Diabetes Mellitus

Chronic hypertension

Pregnant mothers with malnutrition

Early intrauterine infections: CMV, Rubella, Toxoplasma

Chromosome abnormalities

Anemia

Alcohol

et cetera

Fetal factors :

Severe congenital malformation

3. Classification based on *Ballard Score* :

- Preterm : < 37 weeks
- Term : 37 - 41 weeks
- Postterm : \geq 42 weeks
-

Classification based on birth weight:

- Low Birth Weight (LBW) : 1500 - < 2500 gram
- Very Low Birth Weight (VLBW) : 1000 - < 1500 gram
- Extremely Low Birth Weight (ELBW): <1000 gram

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42
43	44	45	46	47	48	49
50	51	52	53	54	55	56

Systemic Infection

Age	Signs and Symptoms	Investigation	Management	Prognosis	Prevention	Further management
1-3 months	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
3-6 months	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
6-12 months	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
1-2 years	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
2-5 years	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
5-10 years	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care
10-15 years	Febrile convulsions, irritability, poor feeding	CSF, blood culture	Antibiotics	Good	Vaccination	Supportive care

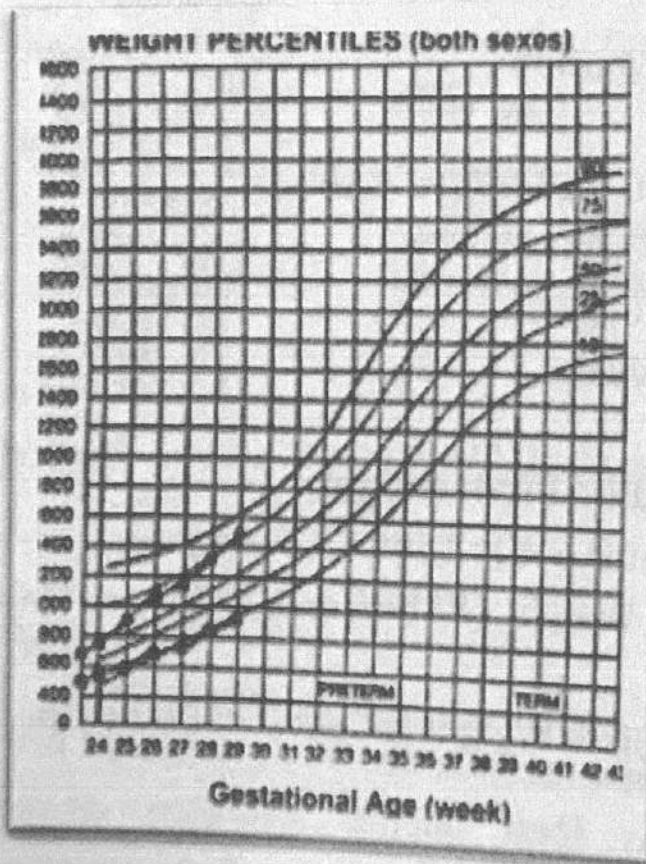


Figure 4 and 5 Manual of Neonatal Care, Cloherty, Care of the Extremely Low-Birth-Weight Infant. 7th Ed, 2013

TOTAL SCORE (Neuromuscular + Physical)	WEEKS
- 10	20
- 5	22
0	24
5	26
10	28
15	30
20	32
25	34
30	36
35	38
40	40
45	42
50	44

Table 1. Manual of Neonatal Care, Cloherty, Care of the Extremely Low-Birth-Weight Infant. 7th Ed, 2013

4. IUGR Classification

a. Asymmetrical IUGR

There are two main categories of IUGR, which are symmetrical and asymmetrical IUGR. Several conditions could be related to symmetrical and asymmetrical IUGR. Asymmetrical IUGR (70%) is more common than symmetrical IUGR. In asymmetrical IUGR, weight restriction is followed by length restriction. The head continues to grow at normal or near normal rate. The lack of subcutaneous fat causes thin and small body that is not proportional to the head. This is due to a protective mechanism that evolved to support brain development in

utero. During this period, embryo/fetus has grown normally for the first two trimesters, but undergo affliction during the third trimester secondary to complications such as preeclampsia, especially severe preeclampsia with late onset type. Asymmetrical IUGR has following characteristics: (1) Caused by short-term negative exposure that interferes with fetal growth, such as late onset severe preeclampsia; (2) Interfere with fetal hypertrophy phase during the third trimester of pregnancy; (3) Head circumference tends to be normal, body length is slightly decreased but weight is decreased more remarkably; (4) Abnormal ponderal index score. (Oluwafemi OR *et al.*, 2013) Other symptoms include dry and scalded skin as well as thin cord. Babies with asymmetrical IUGR are at risk of hypoxia and hypoglycemia. This type of IUGR is most commonly caused by extrinsic factors that influence the fetus during pregnancy, with specific causes including chronic hypertension, maternal malnutrition, genetic mutation, and Ehlers-Danlos syndrome.

b. Symmetrical IUGR

Symmetrical IUGR is less common (30%). This happens due to global growth restriction, showing that the fetus has been growing slowly all the way through the pregnancy. Head circumference is usually proportional to the body. Because most neurons that make up the nerve system develop during the 18th week of pregnancy, babies with symmetrical IUGR are at higher risk of permanent neurologic deficits.

Symmetrical IUGR has the following characteristics: (1) Caused by long-term negative exposure that interferes

with fetal growth, such as early onset severe preeclampsia and chronic hypertension with/without superimposed preeclampsia; (2) Interfere with fetal hyperplasia phase causing proportional IUGR which starts with a decrease in body weight and then length; (3) Body weight, length, and head circumference are below normal value according to Lubchenco score; (4) Ponderal index score tends to be normal. (Oluwafemi OR *et al.*, 2013) Early onset severe preeclampsia is one of the causes of symmetrical IUGR, owing to early complication which could interfere with fetal growth early in pregnancy and often causes neuron deficiency which resulted in symmetrical growth restriction. Another common causes of symmetrical IUGR include early intrauterine infection such as cytomegalovirus, rubella or toxoplasmosis, chromosome abnormalities, anemia, and substance abuse during pregnancy (prenatal alcohol consumption could lead to fetal alcohol syndrome)

c. Ponderal Index

Ponderal Index is a formula used as determinant of leanness, calculated from body mass and height. Ponderal Index was created in 1921 as Corpuscle Index by Rohrer, therefore it is also known as Rohrer's Index. It is actually similar to Body Mass Index (BMI). Ponderal Index is very useful to categorize babies into symmetrical/asymmetrical IUGR. The advantages of using Ponderal Index are: (1) Being able to find out the exact timing of IUGR as well as nutritional condition of newborn babies. (2) Very useful in determining neonatal outcomes among SGA babies whose exact gestational age is unknown and could predict if the baby has a high risk

of perinatal mortality/morbidity (Onyiriuka AN and Okolo AA, 2005)

Ponderal Index Formula:

Adult :

PI : $\frac{BW (kg)}{BH (m)^3}$

Pediatric :

$100 \times \frac{BW (gram)}{Crown-heel-length(cm)^3}$



(Doc. Dr Soetomo General Hospital Surabaya)

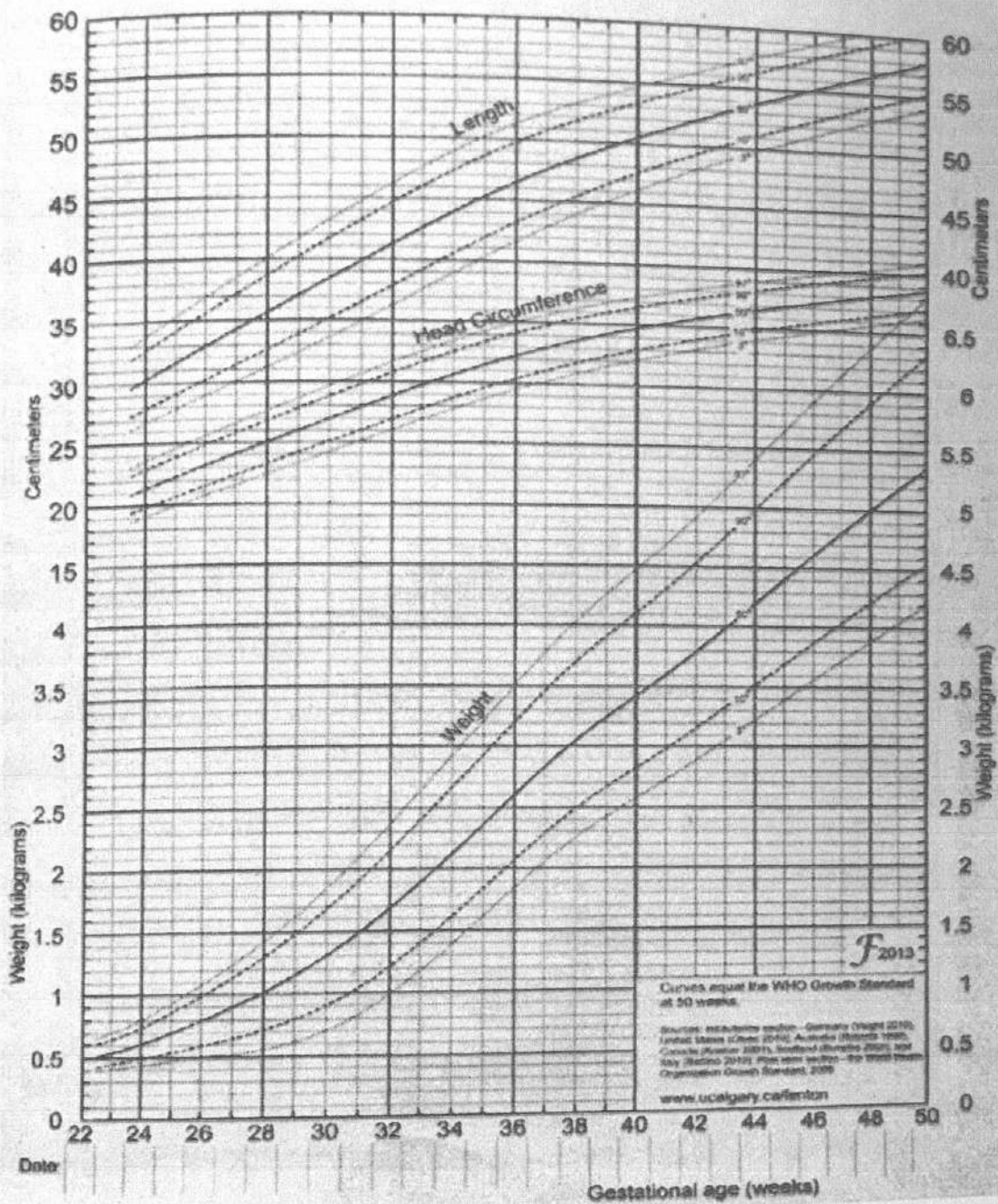
5. Emergencies in IUGR Babies

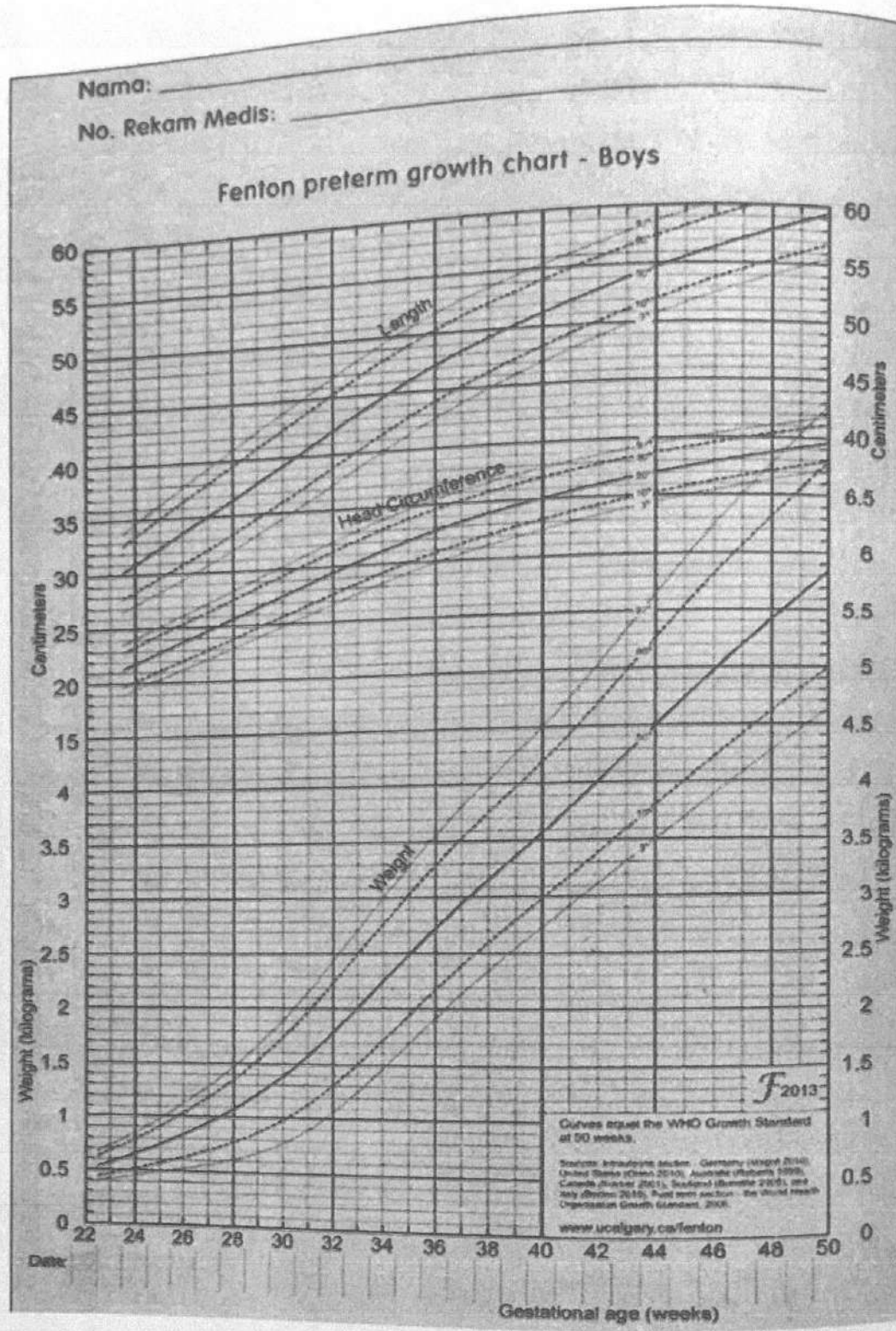
- a. Unstable body temperature
- b. Asphyxia
- c. Prematurity with its complications
- d. Metabolic problems : hipoglycemia, hyperbilirubinemia, hypocalcemia
- e. Seizures
- f. Infection / sepsis
- g. Extrauterine nutrition problems

Nama: _____

No. Rekam Medis: _____

Fenton preterm growth chart - Girl





Fenton & IHDPP Chart Dikutip dari : Cloherty. Manual of Neonatal Care, 7th Ed, 2013

Figure 6 and 7 Manual of Neonatal Care, Cloherty, Care of the Extremely Low-Birth-Weight Infant. 7th Ed, 2013

6. Management of IUGR Babies

- a. Antenatal and labor supervision and care
- b. Body temperature maintenance
- c. Breathing has to be adequate, breathing problems have to be treated immediately
- d. Give proper nutrition, both parenteral or enteral
- e. Prevention and prompt treatment of complications of prematurity
- f. Strict infection prevention
- g. Management of infection / sepsis

7. Treatment of IUGR Babies

- a. *Minimal Handling*
- b. *Hand Hygiene & Universal Precaution*
- c. *Neonatal Resuscitation & STABLE (Sugar, Temperature, Airway, Blood pressure, Lab. Work & Emotional Support)*
- d. *KMC (Kangaroo Mother Care), Breastmilk express, HMF (Human Milk Fortifier)*
- e. *Vit K1 & congenital hypothyroidism screening*
- f. *Management of infection : antibiotics, oral nistatin (mycostatin) as systemic fungal infection therapy*
- g. *NETS (Neonatal Emergency Transport Service)*

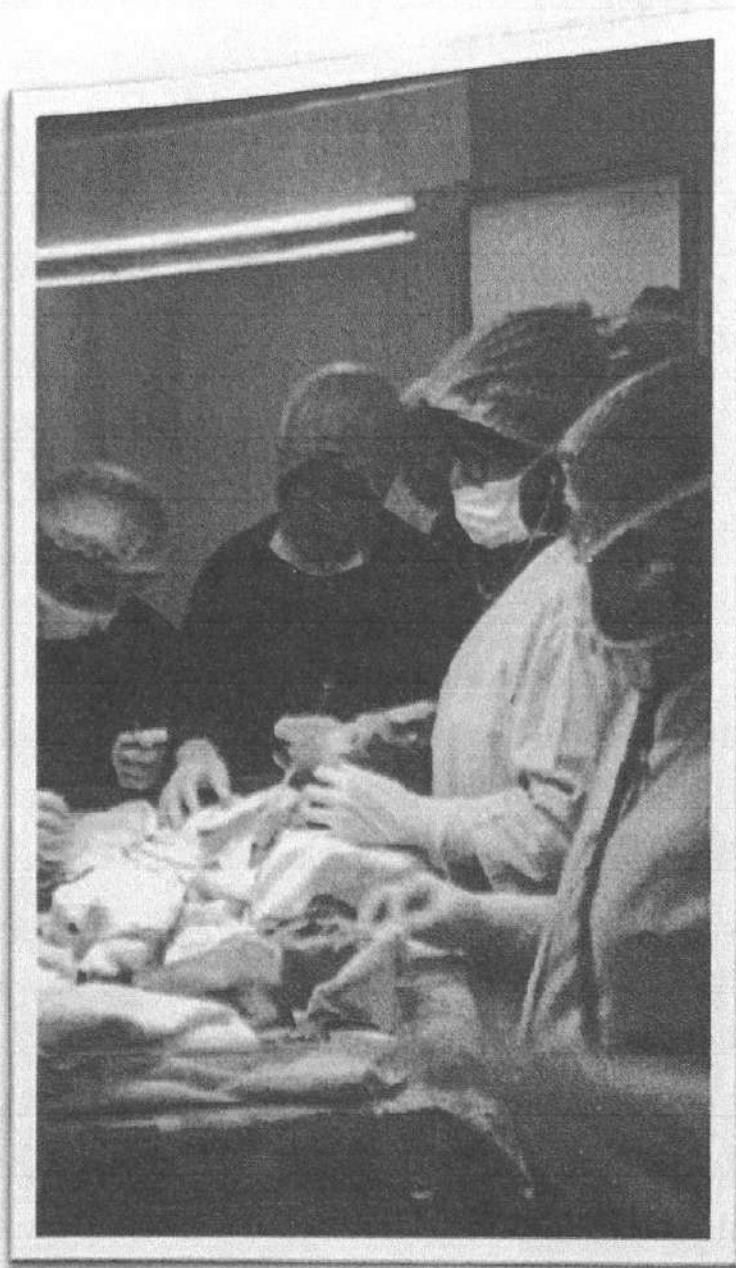


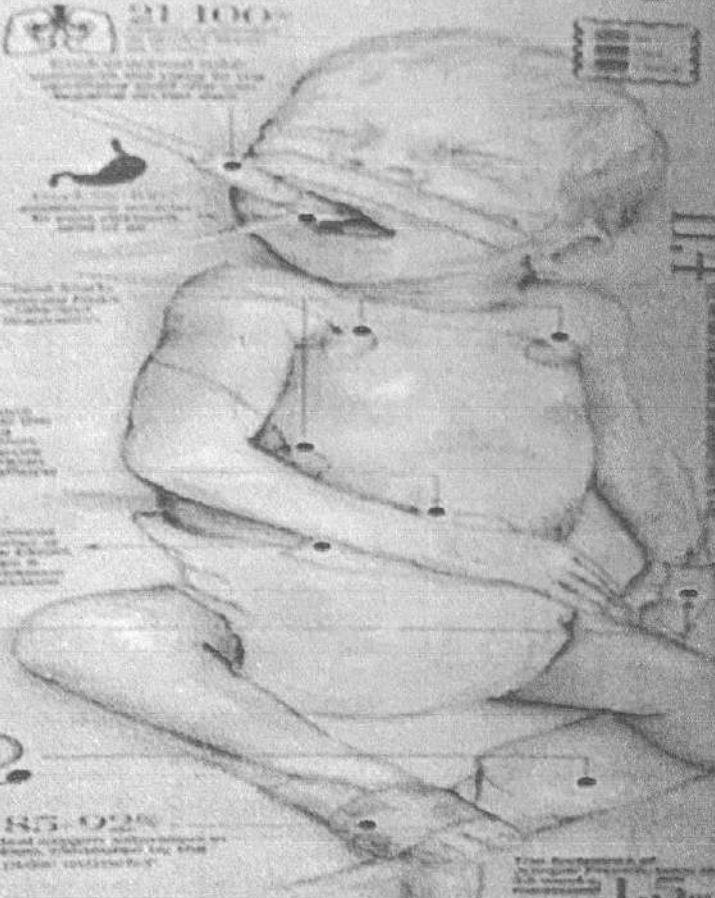
Figure 8 IUGR Babies Resuscitation and Stabilization Team
(Doc. RSIA Putri Surabaya)

Emergencies in IUGR Babies

For IUGR babies with emergencies, immediately do the first golden hour steps, resuscitation, and stabilization based on updated international standards of care. These babies should be treated in level 3 units/NICU.

The delicate science of keeping preemies alive

Surviving for an extra week or two in the NICU is a big deal for a preemie. It's the difference between a life in the hospital and a life at home. The science of keeping preemies alive is a delicate one, and it's one that's constantly evolving. The latest research shows that the most effective way to keep a preemie alive is to keep them in the NICU as long as possible. This means that the more time a preemie spends in the NICU, the better their chances of surviving. It's a delicate science, and it's one that's constantly evolving.



A glossary of severe complications

Babies born weighing less than about three pounds are at risk for the following:

- 26%** Chronic lung disease: This is a long-term condition that affects the lungs. It's caused by a lack of surfactant and can lead to long-term respiratory problems.
- 40%** Necrosis: This is a serious condition that affects the soft tissue. It's caused by a lack of blood flow and can lead to long-term damage.
- 6%** Severe bleeding in the brain: This is a serious condition that affects the brain. It's caused by a lack of blood flow and can lead to long-term neurological damage.
- 5%** Neurological complications: This is a serious condition that affects the brain. It's caused by a lack of blood flow and can lead to long-term neurological damage.
- 7%** Interopticity of the retina: This is a serious condition that affects the eyes. It's caused by a lack of blood flow and can lead to long-term vision problems.
- 30%** Patent ductus arteriosus: This is a serious condition that affects the heart. It's caused by a hole in the heart that allows blood to flow from the lungs to the rest of the body.

Figure 9. Treatment of IUGR babies cited from (<https://www.pinterest.com>)

Updated Neonatal Resuscitation

PADA SETIAP LANGKAH TANYAKAN : APAKAH ANDA MEMBUTUHKAN BANTUAN ?



PADA SETIAP LANGKAH TANYAKAN: APAKAH ANDA MEMBUTUHKAN BANTUAN?

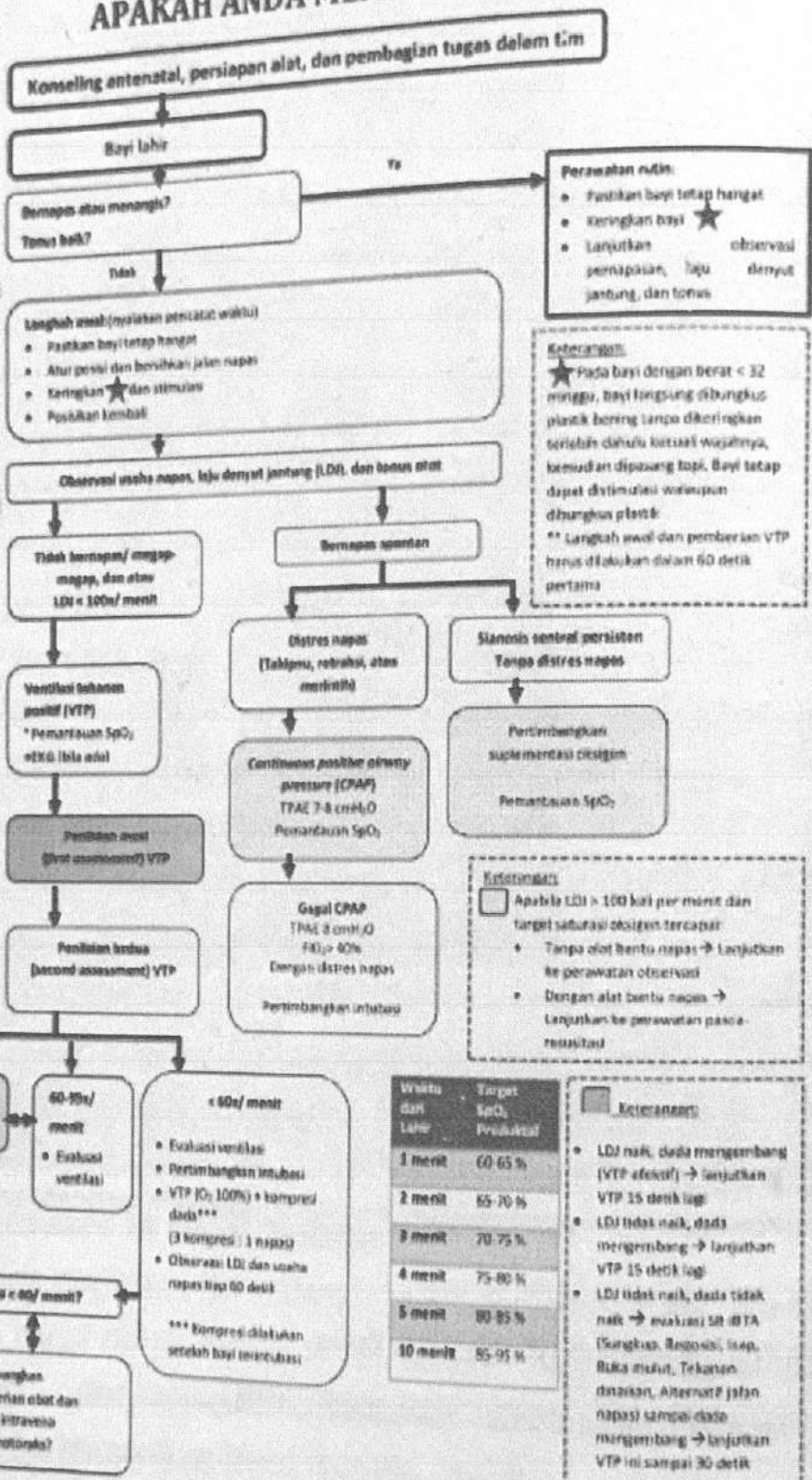
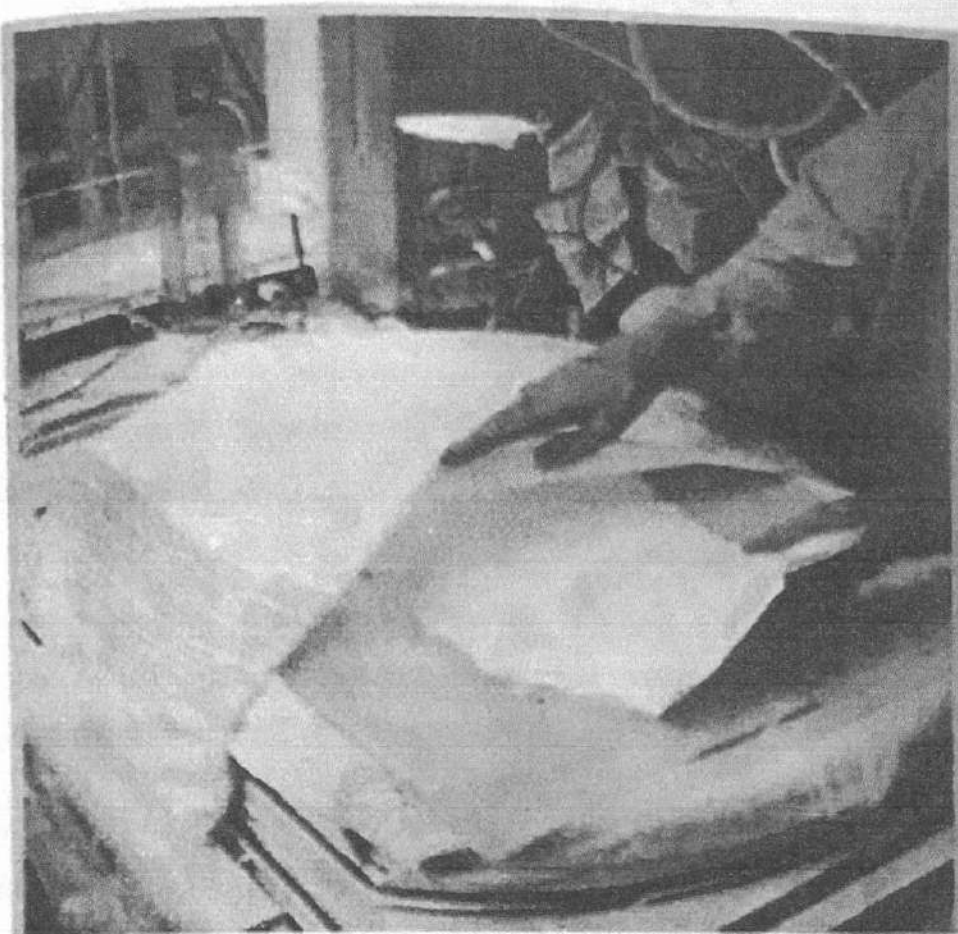


Figure 10 Neonatal Resuscitation, UKK Neonatologi Ikatan Dokter Anak Indonesia, 2015

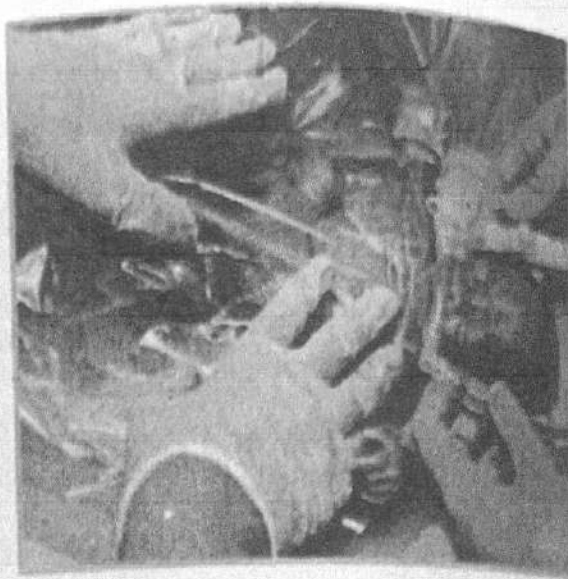


Warming mattress is put under the blanket below heat source

Figure 11 American Academy of Pediatrics and American Heart Association. Textbook of Neonatal Resuscitation, 7th Edition. 2017



A



B

polyethylene plastic bag(A) and wrapping plastic (B) to reduce heat loss

Figure 12 and 13 American Academy of Pediatrics and American Heart Association. Textbook of Neonatal Resuscitation, 7th Edition. 2017


Stabilization Steps for IUGR Babies

Stabilisasi Neonatus

S

Sugar (level kadar gula darah)

• Pastikan kadar gula darah > 50mg/dl sebelum dan pada saat transportasi




• Waktu dan lokasi: 1-2 jam

T

Temperature (suhu tubuh)


• Pastikan suhu tubuh antara 36°C



• Perhatikan suhu tubuh setiap 15 menit dengan alat digital

A

Airway (jalan napas)



• Pastikan jalan napas terbuka

• Pastikan bayi berbaring dengan kepala sedikit miring, tidak datar, tidak ada tekanan. Bila perlu dapat dibantu dengan alat bantu napas

B

Blood Pressure (tekanan darah)

• Pastikan tekanan darah penting lebih rendah kurang 100/70 mmHg per menit

• Pastikan tekanan oksigenasi baik dengan dan tanpa

• Pastikan tidak ada infeksi kulit

L

Laboratory visits (pemeriksaan laboratorium)

• Bila memungkinkan pastikan laboratorium pada saat transportasi

E

Emotional Support (dukungan emosional)



• Siapkan informasi mengenai cara dan lokasi stabilisasi sebelum berangkat ke rumah sakit

Figure 14. Learner Manual. The STABLE Program Post Resuscitation / Pre Transport Stabilization care of sick infantss guidelines for neonatal health care providers, AAP 6th Edition, 2011

Summary

Measures to manage emergencies in IUGR babies include intrauterine referral and education regarding emergencies in IUGR babies, resuscitation skills, IUGR babies stabilization, and referral system referring to NETSS (Neonatal Emergency Transport Service Surabaya) programme.

Nama Mahasiswa :

NIM :

**STATUS KHUSUS DOKTER MUDA
DIVISI NEONATOLOGI**

DEPT./SMF ILMU KESEHATAN ANAK – FK UNAIR RSUD DR. SOETOMO



No. Registrasi :

IDENTITAS BAYI		IDENTITAS ORANG TUA (SESUAI KTP)		
Nama bayi	: RSUD Dr. Soetomo/Luar : Dokter/ Bidan Praktek : Swasta/ Polindes / : Puskesmas/ Rumah Sakit / : Dukun/	AYAH	Nama	:
Jenis kelamin		Umur	:	
Tanggal Lahir (Umur)		Agama	:	
Alamat		Pekerjaan	:	
Anak ke		Gol. Darah	:	
Tempat Lahir Pengirim		IBU	Nama	:
Alamat Pengirim	Umur	:		
Telepon/HP	Swasta/ Polindes / : Puskesmas/ Rumah Sakit / : Dukun/	Agama	:	
		Pekerjaan	:	
		Gol. Darah	:	

DATA PERSALINAN	I	II	III	IV	V	>V
Persalinan ke	Sp.B. kepala	Su. Bracht	Su. Manual	Seksio	Forcep	Vakum
Cara persalinan	Dokter/Bidan/Polindes/Perawat/Dukun					
Penolong	Ketuban pecah dini: Tidak/ Ya (>18 jam)					
Indikasi persalinan patologis	Jumlah: Normal/ Oligohidramnion/ Polihidramnion					
Ketuban	Warna : Jernih/ Hijau/ Keruh/ Mekoneal/ Bau Busuk					
Umur kehamilan (.....minggu)	<input type="checkbox"/> Severe Premature (<32 minggu) <input type="checkbox"/> Moderate Prematur (32- <34 minggu) <input type="checkbox"/> Late premature (34- <37 minggu) <input type="checkbox"/> Aterm (>37- 42 minggu) <input type="checkbox"/> Serotinus/ Postdate (>42 minggu)					
Skor APGAR						
Plasenta	Berat Ukuran Klasifikasi Kelainan					

ANTROPOMETRI BAYI			
Berat lahir	..... g	Panjang badan	..... cm
Lingkar kepala	..... cm	Lingkar dada	..... cm
Score Ballard	..... minggu	Skore Lubchenco	< P ₁₀ ; P ₅₀₋₅₀ ; P > 90

PERAWATAN ANTENATAL		Tidak Pernah/ Pernah (Berapa kali.....)				
Dimana	<input type="checkbox"/> Rumah sakit <input type="checkbox"/> Dokter Umum <input type="checkbox"/> Dokter Kandungan <input type="checkbox"/> Puskesmas <input type="checkbox"/> Bidan <input type="checkbox"/> Polindes <input type="checkbox"/> Lain-lain					
Jumlah anak seluruhnya	Midup orang	Anak ke-1	Anak ke-2	Anak ke-3	Anak ke-4	Anak ke-5
	Usia saat ini (tahun)					
	Riwayat Persalinan					
	Riwayat Penyakit/ sehat					
	Meninggal..... orang	Anak ke-1	Anak ke-2	Anak ke-3	Anak ke-4	Anak ke-5
	Sebab meninggal					
Keadaan ibu pada waktu hamil	Sehat/ sakit					
	Jenis penyakit					
Obat yang dikonsumsi	.....				

PEMERIKSAAN FISIK		Tanggal	/ Bulan	/ Tahun 20	/ Jam
Kondasi umum	Posisi bayi : Baik (comfort position)/ lethargi				
HR : ... / menit	Aktivitas : Gerak cukup/ hiperaktif/ gelisah/ tremor/ kejang/ High pit cry/ lemah				
RR : ... / menit / Apnea	Skor Downe (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10)				
Suhu aksila : ... °C	Tonus : Normal/ hipertoni/ hipotoni				
CRT < 3 detik / > 3 detik					
Kepala	Normal/ Caput Succedaneum/ Cephakohematoma/ Craniosinostosis/ Plagiocephali/ Craniotabes/ Fontanella mayor terbuka / cembung, cekung / menutup/ Hidrosephalus/ Hidransephali/ Microsephali/ Meningokel				
Leher	Normal/ Torticollis/ Hygroma/ Ductus thyroglossus/ Goiter/ Webbed Neck				
Muka	Normal/ Asimetri/ Mongoloid				
Mata	Normal/ Epicanthus/ Sembab/ Perdarahan Subconjunctival/ Nistagmus/ Katarak/ Konjungtivitis/ Ptosis/ Anoptalmia D/S				
Hidung	Bentuk normal/ tidak/ Atresia Choane D/S / Pernapasan Cuping Hidung				
Mulut	Normal/ Chelo/ Gnatho/ Palato/ Schizis/ Macroglossia/ Micrognathia/ Natal teeth/ frenulum linguae pendek/ monilliasis				
Telinga	Normal/ Low Set Ears/ Preauricular Skin Tags/ Fistula / Lanugo				
Thorak	Normal/ Cembung/ Pigeon chest (pectus carinatum)/ Pectus Excavasio/ Retraksi ICS/ Retraksi Subternal Paru : Jantung :				
Abdomen	Bentuk Normal/ Skaphoid/ Kembang/ Omfalokel/ gastroskisis/ ekstrofia buli/ Asites				
Umbilikus	Segar / Layu/ Pucat/ Nanah/ Perdarahan/ Patent ductus Urachus/ granuloma				
Columna vertebralis	Normal/ Spina bifida/ Scoliosis/ Lordosis/ Kiposis / Meningokel/ Sacrocoxygeal dempel				
Alat kelamin	Laki-laki	Bentuk normal/ Jumlah testis D/1/2/ Fimosis/ Hidrokel/ Epi/ Hipospadia/ Kordae penis/ Hernia/ Hematoma/ mikro penis			
	Wanita	Bentuk normal/ Sinikia Vaginalis/ Vagina tag/ Clitorimegali/ Hernia/ Hematoma labium majus/ Minus			
	Ambigua				
Anus	Ada/ Tidak ada / Fistula/ extrofia cloaca/ Ruam				
Ekstremitas	Ekstremitas atas	Normal/ Simian crease/ Syndaktili/ Polidaktili/ Fraktur/ Parese/ Paralise/ Spastik/ D/S			
	Ekstremitas bawah	Normal/ CTEV/ Fraktur / Dislokasi panggul/ Spastik/ D/S			
Kulit	Normal/ Keriput/ Edema/ Akral hangat/ Dingin/ Vernix Caseosa/ Mongolian spot/ Hemangioma/ Nevus/ Sierema/ Nekrosis/ Gangrene/ Pyoderma/ Bula/				
Warna kulit	Normal/ Ikterus/ Plethora/ Merah/ Pucat / Sianosis mukosa/ Perifer/ Pteki/ Ekimosis				
LAIN-LAIN					

PEMERIKSAAN REFLEKS NEONATUS	Refleks: Moro/ Grasp/ Glabella/ Rooting/ Sucking/ Stepping/ Neck righting/ Parasut/ Swimming
------------------------------	--

PJT / Aterm / Postdate

DIAGNOSIS NEONATUS	<ol style="list-style-type: none"> 1. Severe Premature/Moderate prematur /Late Premature/ Aterm /Post date 2. Besar Masa Kehamilan / Sesuai Masa Kehamilan / Kecil Masa Kehamilan 3. Penyakit primer 4. Penyakit penyerta 5. Kelainan kongenital
--------------------	---

EDUKASI	Setiap bayi baru lahir mempunyai resiko tinggi memerlukan masa adaptasi dini usia 0-7 hari setelah lahir (Perinatologi), masa adaptasi lanjut 8-28 hari (Neonatologi) Makin muda umur kehamilannya makin lama dan kompleks masa adaptasinya, sehingga dapat terjadi gangguan fungsi multiorgan yang dapat mengancam jiwanya/ meninggal dunia
---------	--

Edisi Mei 2014. (AH)

References

1. American Academy of Pediatrics and American Heart Association. Textbook of Neonatal Resuscitation, 7th Edition. 2017
2. American Academy of Pediatric, American College of Obstetricians and Gynecologists. Guidelines for Perinatal Care, 7th ed. Elk Grove Village, IL: American Academy of Pediatrics, American College of Obstetricians and Gynecologists; 2012.
3. American Academy of Pediatrics and the American College of Obstetricians and Gynecologists Breastfeeding Handbook for Physicians. 2006. APP, Elk Grove Village, IL and ACOG, WDC
4. Bergman NJ. RCT of skin-to-skin contact from birth vs conventional incubator care for physiological stabilisation In 1200 – and 2199 – gram newborns. Acta Paediatrica 2004 vol 93 (b) : 779-785
5. Bose C, Van Marter LJ, Laughon M, O'Shea TM, Allred EN, Karna P, Ehrenkranz RA, Boggess K, Leviton A. Fetal Growth Restriction and Chronic Lung Disease Among Infants Born Before The 28th week of gestation. Pediatrics. 2009 Sep 1; 124(3) : e450-8
6. Committee on Fetus and Newborn, American Academy of Pediatrics Respiratory support in Preterm Infants at birth. Pediatrics 2014;133(1):177-174
7. Cummings J, Committee on Fetus and Newborn, American Academy of Pediatrics. Antenatal counseling regarding resuscitation and neonatal intensive care before 25 weeks of gestation. Pediatrics 2015;136(3): 588-595

8. Eiland E, Nzerue C, Faulkner M. Preeclampsia 2012. *J Pregnancy* 2012;2012:586578. doi: 10.1155/2012/586578
9. Gomella T, Cunningham M, Eyal F. Sepsis. In: Neonatology. seventh ed. United States of America: McGraw-Hill. USA; 2013. p. 865-73.
10. Lawrence RA and Lawrence RM. Breastfeeding, A Guide for The Medical Profession, Sixth Edition, 2005. St. Louis, MO: Mosby, Inc
11. Learner Manual. The STABLE Program Post Resuscitation / Pre Transport Stabilization care of sick infantss guidelines for neonatal health care providers, AAP 6th Edition, 2011
12. Ligia Maria Suppo de, Souza Rugolo, Regina Bentlin, Cleide Enoir Petean, Trindade. Preeclampsia : Effect on The Fetus and Newborn. NeoReviews Vol 12 No 4 April 2011
13. Ligia Maria Suppo de, Souza Rugolo, Regina Bentlin, Cleide Enoir Petean, Trindade. Preeclampsia : Early and Late Neonatal Outcomes. NeoReviews Vol 13 No 9 September 2012
14. Manual of Neonatal Care, Cloherty, Care of the Extremely Low-Birth-Weight Infant. 7th Ed, 2013
15. Misdayanti, Shrimarti, Risa Etika. Relationship between Health Resources Support with Exclusive Breastfeeding: An Observational Analytic Study. International Journal of Preventive and Public Health Sciences. Jul-Aug 2016;2(2)
16. Nurita Alami DW, Agus H, Risa E, Martono TU, Dina A, Kartika DH, Mahendra TAS, 2015. Pengaruh Fortifikasi ASI Pada Bayi Kurang Bulan Terhadap Parameter Pertumbuhan Dan Kadar Fekal IgA

Sekretori. Penelian Karya Ilmiah Akhir PPDS I IKA
FKUA-RSUD Dr Soetomo Surabaya

17. Oluwafemi OR, Njokanma FO, Disu EA, Ogunlesi TA. Current pattern of Ponderal Indices of term small-for-gestational age in a population of Nigerian babies. *BMC Pediatrics* 2013, 13:110. Available from: <http://www.biomedcentral.com/1471-2431/13/110>
18. Onyiriuka AN, and Okolo AA. Small-for-gestational age, ponderal index and neonatal polycythaemia: a study of their association with maternal hypertension among nigerian women. *Annals of African Medicine* 2005;4(4):54-159.
19. Pratomo Hadi. Review of Kangaroo Mother Care (KMC) in Indonesia 2013-2014. Faculty of Public Health University of Indonesia. Jakarta, 2014
20. Rinawati Rohsiswatmo, Lily Rundjan, Resusitasi Neonatus, UKK Neonatologi Ikatan Dokter Anak Indonesia, 2015
21. Rini Andriani, Lily Rundjan. Nistatin Oral Sebagai Terapi Profilaksis Infeksi Jamur Sistemik Pada Neonatus Kurang Bulan. *Sari Pediatri*, vol 11, No 6, April 2010
22. Risa Etika. Skin To Skin Contact Promotes Breastfeeding. Indonesian Pediatric Society. Breastfeeding Sick Babies. 2014
23. Risa Etika, Elmi Aris Rahayu, Wahyu Widiati, Choiriyah. Panduan Praktis Perawatan Metode Kanguru di RSUD Dr Soetomo, 2015
24. Risa Etika. Surabaya Quintuplet : a Breastfeeding Success Story 1st Surabaya Breastfeeding Symposium. 2016 may 21-22

25. Rulina Suradi. Tatalaksana Pemberian ASI. Buku Ajar Neonatologi, Edisi , 2008 : 377-387
26. Satuan Tugas ASI. Strategi Optimalisasi Pertumbuhan Bayi ASI Eksklusif. Ikatan Dokter Anak Indonesia, 2014-2016
27. Senterre T. Practice of enteral nutrition in very low birth weight and extremely low birth weight infants. Dalam: Koletzko B, Poindexter B, Uauy R, editor. Nutritional care of preterm infants: scientific basis and practical guidelines. World Rev Nutr Diet. Basel, Karger, 2014, vol 110, hal. 201-14
28. Setya Dewi Lusyati, Stabilisasi bayi baru lahir pasca resusitasi dilayanan tingkat pertama, RSAB Harapan Kita Jakarta, 2016
29. Utami Roesli. International Conference on CSR and Combating Malnutrition: Obtaining Millenium Development Goals (MDGs) in Indonesia, Universitas Paramadina, Jakarta, 2010
30. Ziegler E.E. Human Milk and Human Milk Fortifiers. In Koletzko B, Poindexter B, Uauy R. Editors. Nutritional care of preterm infants: scientific basis and practical guidelines. Basel Karger, 2014, vol 110, p215-27.
31. www.plannemotes.blogspot.com
32. www.un.org
33. <https://www.pinterest.com>
34. www.slideshare.net

Di Indonesia, berdasarkan hasil evaluasi MDGs, tingkat kasus kematian ibu (AKI) dan bayi baru lahir (AKB) masih tergolong tinggi. Padahal target yang dicanangkan PBB dalam era SDGs saat ini yaitu 70/100.000 (AKI) dan 23/1.000 (AKB) kelahiran hidup.

Salah satu penyebab masih tingginya AKI-AKB adalah karena belum maksimalnya kualitas pelayanan kesehatan maternal-neonatal di berbagai tatanan fasilitas kesehatan terutama dalam penanganan kasus ibu hamil dengan pre-eklampsia serta dampak pada bayi yang dilahirkannya. Sehingga kita memerlukan rangkaian upaya strategi khususnya dalam usaha peningkatan kualitas pelayanan perinatal dengan memfasilitasi para profesional medis di bidang kesehatan ibu hamil serta bayi baru lahir, terutama para dokter spesialis kandungan, spesialis anak, dokter umum serta bidan dan perawat, untuk senantiasa meningkatkan kapabilitas profesionalitasnya dalam menurunkan angka kematian ibu-bayi dengan tanpa melupakan agar tetap menjaga kualitas luaran dari generasi bangsa dalam perspektif ilmu tumbuh kembang dan rehabilitasi medik.

Buku ini diterbitkan sebagai bahan referensi dalam proses pembelajaran demi majunya pelayanan kesehatan perinatal di tempat sejawat masing-masing bekerja, buku ini berisikan materi-materi topik yang disajikan dalam temu ilmiah yang telah berlangsung. Selamat membaca dan semoga bermanfaat bagi sejawat sekalian.

Dutch Foundation



Universitas Airlangga
Faculty of Medicine

SAGA

Jl. Kedinding Lor. Gg. Delima no.4A
Kenjeran, Surabaya
saga.penerbit@gmail.com
www.pustakasaga.id

