

MANAGEMENT OF GYNAECOLOGIC AND OBSTETRICAL EMERGENCIES IN A RURAL AND URBAN SETTING

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PLAN

Definition of terms.

- Epidemiology: - Gynaecologic Emergency
- Obstetric Emergency.
- Etiology of Gynaecologic Emergency.
- Etiology of Obstetric Emergency.
- Objective of Management Gynaecologic Emergency.
- Objective of Management Obstetric Emergency.
- General Measures Common to both Emergencies.

PLAN (Suite)

- Specific Measures to Gynaecologic Emergencies.
- Specific Measures to Obstetric Emergencies.
- Particularities of an Urban Setting.
- Particularities of a Rural Setting.

Definitions.

- Gynaecology comprises health related issues affecting woman from the pubertal period to her last days, that has to do with the genital system. It also includes complications pregnancy occurring before the 22 completed weeks of gestation.
- Obstetrics on the other hand is the period of gestation that extends from 22 weeks to 6 weeks post-partum. It includes direct causes, related to the pregnancy and indirect causes, medical affections that may complicate pregnancy in the ante, intra, post-partum periods.

Gynaecologic Emergencies

Health related issues that may lead to morbidity and mortality if not properly managed:

- Bleeding in the first half of pregnancy:
 - Abortion related disorders (induced/spontaneous).
 - Spontaneous abortions (threatened, inevitable, incomplete, complete, missed abortion).
 - Induced abortions (Post-abortum infections of all grades, peritonitis).
 - Molar pregnancy, invasive mole, choriocarcinoma.

Gynaecologic Emergencies

- Excessive sympathetic symptoms of pregnancy (hyperemesis gravidarum) may present in an acute state.
- Medical conditions, diabetes, high blood pressure, endocrine disorders (hyperthyroidism, pheochromocytoma etc.) may present as emergencies in early pregnancy.

Gynaecologic Emergencies

- STI in its acute form PID is a gynaecologic emergency.
- Bleeding from the genital tract without pregnancy (Neoplasms CA cervix, endocervical/endometrial polyps, sub-mucous/intramural myomas, endometrial hyperplasias / carcinomas, dysfunctional uterine bleeding).
- Psychosomatic disorders e.g. hysteria, pseudocyesis.
- Ovarian pathologies: Torsion, rapidly increasing mass etc. may present as an acute gynaecologic emergency.

Vital Statistics

- True incidence of abortion unknown, 62% spontaneous abortion first trimester.
- 1 in 150 women die of abortion complication 99% occurring in the developing world.
- 13% of maternal deaths abortion related complications.
- 30-40% of maternal deaths at CMY due to abortion related complications.
- Incidence of molar pregnancy 1 in 1500 deliveries in Cameroon. Higher incidences seen in Asia - 5% risk of malignant degeneration to choriocarcinoma.

Vital Statistics-1

- 20-40% of women between 30-40 years carry uterine myomas, submucous, intra-mural types may be very haemorrhagic.
- 40-50 years peak age for cervical cancer and perimenopausal disorders, may present with life threatening haemorrhage.
- DUB pathology resulting from immaturity of the hypothalamo-pituitary axis, seen around puberty and perimenopausal periods can be very haemorrhage.

Gynaecologic Emergencies

- Febrile conditions, malaria, meningitis, encephalopathies (viral, toxoplasmosis etc.) occurring in early pregnancy.
- Convulsions, coma occurring in early pregnancy.
- Abdominal pain in early pregnancy.
- Difficulty in breathing in early pregnancy.

Objectives of Management

- Determine the degree of illness.
- Prevent maternal morbidity and mortality

General Measures.

Rapid Initial Assessment

Assess	Danger signs	Consider
Airway/Breathing	Cyanosis, respiratory distress, skin pallor, lung fields	Severe anaemia, heart failure, asthma,
Circulation (signs of shock)	Skin cool & clammy, pulse, BP	Shock
V/E Bleeding early pregnancy	Gestational age	Abortion, ectopic pregnancy, molar pregnancy
Unconscious	Gestational age, temperature, BP, Blood sugar	Malaria, epilepsy, meningitis, diabetes, hypertensive disorders

General Measures - 1

Rapid Initial Assessment.

Assess	Danger signs	Consider
High fever	Weak,lethargic,frequent painful micturition, unconscious, neck stiffness, lungs, abdominal tenderness, vaginal discharge	Malaria, pyelonephritis, PID, pelvic abscess, postabortal peritonitis, pneumonia.
Abdominal Pain	Gestation age, BP, Pulse, temperature, size of uterus Age, Pallor, pulse, BP, size of uterus, speculum	Ovarian cyst, appendicitis&pregnancy, ectopic pregnancy
Vaginal bleeding without pregnancy		DUB,myomas, endometrial hyperplasia, Neoplasms (Cx, uterus,ovary).

Implementing Rapid Initial Assessment Scheme

Rapid initiation of treatment, immediate recognition specific problem, quick action:

- Train all staff.
- Conduct clinical or emergency drills.
- Ensure easy access to all the services, equipment functional.
- Establish norms and protocols, display this for easy access when needed.
- Quickly review all waiting patients.
- Provide emergency drugs, services pending payment.
- Respect the woman's dignity, right to privacy and don't be judgemental. Provide corrective counselling at the end.

Implementing Rapid Initial Assessment Scheme - 1

Socio-demographic characteristics may influence management:

- Marital status, relationship with her partner.
- Social status of the woman/couple, their cultural and religious practices, beliefs and expectations.
- Personality of persons involved, quality and nature of social, practical and emotional support.
- Nature, gravity and prognosis of the problem, the availability and quality of the health services.

Implementing Rapid Initial Assessment Scheme - 2

- Communicate with patient and family, diagnosis, treatment, prognosis.
- Arrange for treatment or referral.
- Schedule a follow-up visit to check progress and discuss available options.

Management

- Emergencies do occur suddenly or as a complication of treatment or failure to properly manage or monitor.
- Some emergencies can be prevented by careful planning e.g FP and prevention of unwanted pregnancies, following clinical guidelines e.g. ectopic pregnancy, septic abortions, PID etc, close monitoring e.g. transfusional accidents, ectopic pregnancy.
- Pre-requisite to emergency management is that members of the team should know their roles.

Management - 1

- Team members should know: the clinical situations, the diagnosis & treatment, drugs, their use, administration and side-effects; how to use emergency equipments and how it functions.
- Ability of a facility to deal with emergencies should be assessed and reinforced by frequent practice of emergency drills.

Initial Management

- Stay calm, think logically, focus on the needs of the woman.
- Team spirit must be respected, thus call for HELP.
- Distribute roles if an emergency team is non-existent in the facility.
- If patient is UNCONSCIOUS see table.
- If shock is suspected, immediately start treatment
- Interview patient and relatives for major symptoms, examine and make a presumptive diagnosis.

Initial Management - 1

- Get an IV-line with a big cannula size 16-18G.
- Where necessary group and cross-match blood.
- Monitor vital parameters (BP, Pulse, RF, Diuresis).
- Initiate treatment according to presumptive diagnosis and modify accordingly.
- Prepare for referral if inadequate infra-structure or incompetence of personnel.
- Re-evaluate and modify treatment accordingly.

Measures Specific to Gynaecology

- Continue treatment following diagnosis:
 1. Emergency laparotomy for ectopic pregnancy. Ectopic pregnancy is a gynaecologic emergency, with active bleeding, thus surgery is urgent with or without blood if parameters are stable. Ketamine is usually the preferred anaesthetic drug.
 2. Hyperemesis gravidarum, admission, isolation, rehydration, Nil per os, counselling to partner and family.

Measures Specific to Gynaecology (1)

3. Abortions managed as it presents, spontaneous or induced, identify aetiology, counselling for FP, STI, gynaecologic malignancies.

Measures Specific to Gynaecology - 1

1. Molar pregnancy: Aspirate after baseline investigations, histology, follow-up Beta hCG assay, COC, for at least two years, counselling as concerns risk associated.
2. Infections are managed accordingly.
3. Convulsions managed according to diagnosis. Consult the various specialist as indicated.

Measures Specific to Gynaecology - 2

4. Bleeding not related to pregnancy: Good history and examination, presumptive diagnosis, lab test (hormone profile, FBC, clotting profile, thyroid disorders, PAP smear, endometrial biopsy etc.) and treat accordingly.

Issues Specific to Rural Communities

- Lack of qualified staff, infra-structure.
- Distant between the district health facility and specialised centres where adequate treatment is possible.
- Low socio-economic status of the patients thus financial constraints.
- Lack of specific medications e.g. prostaglandins, blood and blood products.
- Roads and absence of ambulances in some of our rural areas.
- Influence of cultural norms, religious beliefs.

Obstetrics: Introduction

- Most pregnancies and deliveries usually occur without any complications.
- Today the high risk approach, abandon because all pregnancies carry some risk, be it maternal morbidity and mortality.
- About 15% of all pregnant women do develop a complication that may jeopardize her life.
- These complications may necessitate the use of major obstetrical interventions.

Introduction - 1

- Emergencies occur suddenly, thus need for prompt action.
- It may be bleeding occurring after 22 weeks (WHO), 28 weeks, developing countries.
- Headaches, blurred vision, convulsions or loss of consciousness [Eclampsia, Epilepsy, Encephalopathies (malaria, viral toxoplasmosis)], elevated blood pressure.
- Unsatisfactory progress of labour.
- Fever in the ante partum, intra-partum and post-partum.
- Severe abdominal pain, ante-partum & intra-partum.
- Dyspnoea.

Objectives of Management

- Evaluate the degree of illness.
- Prevent maternal morbidity and mortality.
- Prevent foetal morbidity and mortality.
- Most emergencies can be prevented by quick assessment.

General Measures

Rapid Initial Assessment

Assess	Danger signs	Consider
Airway & Breathing	Cyanosis, respiratory distress, mucous membranes, lungs	Severe anaemia, heart failure, pneumonia, asthma.
Circulation (shock) Vaginal Bleeding	BP, pulse Gestational age, delivery, placenta, Examine volume bleeding, uterus, placenta	Placenta praevia, abruptio, ruptured uterus, uterine atony, tears, retained products

General Measures - 1

Rapid Initial Assessment

Unconscious or convulsion	Gestational age, BP Pulse, temperature	Eclampsia, malaria, epilepsy, tetanus
High temperature	Weakness, lethargy, frequent micturition, examine-unconscious, complete examination	UTI, Malaria, endometritis, DVT, mastitis etc.
Abdominal pain	Gestational age, BP Pulse, temperature, uterus	Labour, chorioamnionitis, abruptio placenta, rupture

Measures Specific to Obstetrics

Continue treatment accordingly:

- ANTEPARTUM-bleeding: Placenta praevia, determine amount of bleeding, conservative or emergency management.
- Abruptio placenta: Rupture membrane, IV oxytocin, C/S when indicated.
- Vasa praevia: Usually postpartum diagnosis.
- PET/eclampsia follow protocol of the service.
- Fever, treat the aetiology.
- Loss of consciousness/convulsion, managed accordingly, eclampsia, epilepsy, encephalopathies, diabetes etc.

Measures Specific to Obstetrics - 1

- INTRAPARTUM: Vaginal Bleeding:
 - Abruptio placenta
 - Placenta praevia
 - Imminent / uterine rupture
 - Vasa praevia
 - DIC
 - Dystocias, cervical, mechanical, dynamic
 - Foetal distress
 - Local causes: CA cervix, condyloma, endocervical polyp, varices etc.

Measures Specific to Obstetrics - 2

- Postpartum – Vaginal bleeding:
 1. Uterine atony, risk factor e.g. grand-multiparity, uterine myomas, use of oxytocics, prolonged labour, chorioamnionitis, placenta retention, uterine inversion etc.
 2. Uterine rupture, risk factors, uterine perforation, previous scars, grand-multiparity, instrumental delivery, internal/external versions etc.

Measures Specific to Obstetrics - 3

- Lacerations to the genital tract, perineal tears, cervical tears, vaginal tears, episiotomy.
- Disseminated intravascular coagulation, IUD, chorioamnionitis, use of hypertonic saline solution 20%, abruptio placenta or retroplacental haematoma.

Measures Specific to Obstetrics - 4

- Dyspnoea, chest pain, pulmonary embolism.
- Convulsions, eclampsia, epilepsy, encephalopathies (viral, bacterial, protozoal).
- Fever / pain, endometritis, mastitis, malaria, typhoid fever, post-traumatic cellulitis, managed accordingly.