Ob/Gyn checklists:

The included topics are:

- **Abdominal pain.**
- **Antepartum hemorrhage.**
- **Adenomyosis.**
- **Amenorrhea.**
- **Antenatal booking.**
- **Breech presentation.**
- **Diabetes mellitus.**
- **Polyhydramnios.**
- **Endometrial polyps.**
- **Endometriosis.**
- **Fibroids.**
- **Infertility.**

Abdominal pain	**History:**
	1- SOCRATES. 2- Associated symptom (according to the differentials → Gyne, Obs , GI, Renal, Vascular) GYNE: DEGENERATIVE FIBROID, COMPLICATED OVARIAN LESION, PID. OBS: ECTOPIC PREGNANCY, LABOR PAIN, PET, PLACENTAL ABRUPTION. GIS: BILIARY COLIC, CHOLECYSTITIS, GASTROENTERITIS, INTESTINAL OBS. RENAL: URETHROLITHIASIS, UTI, PYELONEPHRITIS. Meds: cocaine. 3- Fetal assessment: movement, US.
	QUESTIONS you can ask in history: a. LMP b. Any urinary symptoms c. Any contraceptives d. Any past abdominal/pelvic surgery e. Obstetric/gynecological history f. Previous history of PID.
	Physical examination:
	General, abdominal, local (speculum and PV). ABDOMINAL: palpation→ tenderness, masses, Fundal height.
	Investigations:
	Nonimaginary: CBC, Blood group & Rh. Urine analysis and culture. B-hCG Imaginary: US for the uterus (fetal heart, fibroids, ovarian pathology) , for the abdomen. X-ray (erect and supine position).
	Approach to evaluate:
	General: Booked or not, LMP, GA, Drugs. Assess the labor: fetal movement, watery vaginal discharge, bleeding, show.
	Steps to evaluate:

	-Vital signs, blood group and Rh. -General, abdominal and vaginal exam. -Fetal assessment by US (1. placental status and location, 2. liquor amount, 3.no. of fetuses, 4. fetal viability,5. presentation, weight and measurements).
	Characteristics of labor pain:
	Management in cases of adnexal cyst (5*6cm):
	a. Serum CA 125 level
	b. Color flow Doppler assessment of the correspondent ovary. c. Laparoscopic ovarian cystectomy d. Laparotomy/ovarian cystectomy e. If no torsion→ conservative and re-evaluation.

OBS/ antepartum hemorrhage	
Placenta previa	**Risk factors:**
	❑ Introduction ❑ Increasing Maternal age ❑ Grandmultiparity ❑ Previous placenta previa ❑ Previous CS ❑ Previous uterine surgery (myomectomy/ curettage). ❑ Multiple gestation ❑ History of threatened abortion during this pregnancy ❑ Abnormal lie and presentation ❑ Smoking
	Symptoms: general, abdominal and PV + Fetus.
	0. Vaginal bleeding. 1. Caused by: is it spontaneous or preceded by trauma. 2. associated with: Abdominal and/ or uterine pain. 3. Fetal bradycardia or decelerations. 4. amount, color, clots, and duration of bleeding.
	Physical signs:
	1. Vital signs (blood pressure, pulse) 2. Abdominal (non-obstetric): tenderness 3. (obstetric): Fetal presentation, engagement, fundal height. 4. Fetal heart activity 5. Speculum examination to rule out local cause
	Steps of evaluation and management;
	▪ airway-breathing-circulation ▪ assess amount of bleeding ▪ 2 large bore canulae ▪ Bloods (CBC, crossmatch, clotting profile) ▪ IV fluids ▪ Consider transfusion ▪ Catheterize and monitor urine output ▪ Investigate for cause of bleeding ▪ Assess fetal viability and well-being.
	Investigations:
	1. CBC, Blood group, Cross match, Coagulation profile. 2. KFT, LFT. 3. Urinalysis and culture. 4.Ultrasound scan
	What to look for in the ultrasound
	1. Placental localization, retroplacental hematoma.

	2. Check viability/ weight / lie/ (if twins the chorionicity). 3. Gestational age. 4. Amount of liquor. 5. if we have previous multiple CS → we need to know the scar site.
	Other differentials:
	1. Placenta previa 2. Abruption placenta 3. Vasa previa 4. uterine bleeding. 5.Local causes: trauma or infections. 6.cervical polyp or mass. 7.Bleeding disorders
Placental abruption	**Risk**
	- Increasing parity. - Maternal age. - Cigarette smoking. - Multiple gestations. - Prior abruption. - Trauma. -Previous abortion. -Pregnancy after IVF.
	Steps of evaluation and management;
	1. Ultrasound evaluation. 2. Admission to delivery room. 3. Monitoring of the mother and the fetus. 4. Complete blood count. 5. Assessment of clotting function. 6. Prepare blood. 7. Plan for vaginal delivery.
Vasa previa	**Risk factors**
	- Low lying placenta. - Multiple gestations. - Bilobed/ succenturiate-lobed placenta. - History of vaginal bleeding - History of prior surgical delivery.

Others gynecological pathologies		
Adenomyosis	**- Other common signs and symptoms:** 1.Anemia. 2.abdominal tenderness. 3.pressure symptoms (bowel & urinary). 4. Secondary dysmenorrhea. 5. Menorrhagia / intermenstrual spotting. 6.painful sexual intercourse. **- Other problems associated with it:** infertility, endometriosis. Ways to differentiate between it and fibroids: Transvaginal Ultrasound, MRI which is more accurate. **-Risk factors:** •Being in her mid-40s. • Having children. • Had 2 previous surgical deliveries.	
Secondary amenorrhea/ Secondary infertility:	**-Symptoms to ask about in the history:** *Current period. *Stress, exercise and eating disorders. PPH, galactorrhea. Hirsutism and Asherman syndrome→ curettage history. Past obstetric, medical, surgical, family history. **-Investigations:** 1. Serum progesterone level in mid luteal phase, androgenic hormones, FSH. 2. HSG or hysteroscopy 3. Ultrasound	
Primary Amenorrhea	**HISTORY:** -Menstrual history - Cyclical pain - Secondary sexual characteristics -Diet (Anorexia nervosa, Bulimia) - Weight loss or gain - Stress - Exercise - Androgen excess (Hirsutism, virilizing symptoms) - Galactorrhea - Absent sense of smell - Symptoms of hyper or hypothyroidism - Past medical history cancer, chemotherapy, radiation therapy, chronic illness, surgery, oophorectomy) - Family history (Delayed menarche, premature ovarian failure) - Medications - Smoking	**PHYSICAL EXAM:** •Vital signs •Height (answer = 145cm) •Weight (answer = 50 kg) •Head and neck Visual fields Proptosis, lid lag Sense of smell Thyroid •Androgen excess •Breasts size, Galactorrhea Tanner stage (answer = Tanner stage 1) •Abdomen (mass, hair) • External genitalia - Pubic hair - ambiguous genitalia, clitoris size, imperforate hymen

	INVESTIGATIONS: -FSH, LH. Estrogen. Progesterone challenge test, OCPs withdrawal. -US.	

Antenatal booking		
History	**1. HPI:** **-Gravida-para** -if her cycle is regular or not (lactation and OCPS) / LMP/ Pregnancy test. -Pregnancy symptoms: nausea, morning sickness and vomiting/ complaints: bleeding, pain, discharge. **2. past medical and surgical:** Most importantly (a. Diabetes. b. Hypertensive.), blood transfusions. **3. Social and drug history:** Smoking, alcohol, occupation, and drug allergy.	
Physical examination	Weight, height, Blood pressure.	
Investigations; Non-imaginary (Labs), Imaginary (US)	**US**: 1-Gestational sac site. 2- size (dating). 3-Fetal heart. 4-Number of fetuses. 5-Any abnormalities. 6-uterine fibroid and ovarian cyst.	7-If she comes later in pregnancy: Placental site and amount of liquor.
	Labs: 1. CBC. 2. Blood group. 3. Rh type. 4. Urine analysis and culture.	5. Fasting blood sugar, OGTT. 6.TSH. 7. Hepatitis screen. (B and C) 9. Rubella IgG/IGM.
Medications mainly in the first trimester	folic acid and antiemetics (the latter if needed).	
	The next visit is after 4 weeks.	
Screening scan:	11-14 weeks gestation.	
How would you confirm the diagnosis of any genetic disease?	1. chorionic villous sampling 2. amniocentesis	
Every antenatal visit you need to do	: history, physical, investigations, meds.	
Medications that should be given:	Folic acid, iron, calcium, vitamin D.	
What to do if the patient blood group is negative?	1. Her husband's blood group. 2. If she received anti D immunoglobulin in previous pregnancies. 3. Order for indirect Coombs test.	

Screening for down syndrome:	1. Nuchal translucency 2. first trimester biochemistry 3. Triple test 4. Quadruple test

Abnormal fetal presentations	**Breech presentation:**
Types	1. Extended breech (frank). 2. Flexed breech (complete). 3. Footling (foot).
Possible causes/ Etiology:	• Prematurity. [ ] • Fetal anomalies. [hydrocephalus] • Multiple gestations. • Maternal uterine anomalies. [tumor, fibroid, septum • Abnormal placental location. [ ] • Oligohydramnios and polyhydramnios.
Signs and symptoms:	• Fetal head located outside the pelvis on abdominal palpation. [ ] • Fetal heart heard high in the pelvis. [ ] • Buttock, one foot, or both feet palpable on cervical examination. [ ]
Associated conditions:	• Abruption placenta. [ ] • Placenta previa. [ ] • Prolapsed of the umbilical cord. [ ] • Premature rupture of membranes. [ ] --- • Growth restriction. [ ] • Entrapment of the fetal head. • Intra cranial hemorrhage. [ ] • High risk of perinatal mortality. [ ] * Fetal hypoxia, asphyxia * Fetal injury, eg. Fractures, visceral injury --- * Maternal injury like tears.
Prerequisites needed for vaginal delivery.	• No contraindication for vaginal delivery. [ ] • Singleton breech [ ] • Frank breech [ ] • The estimated fetal weight is between 2500 g and 3800 g. [ ] • Availability of continuous electronic fetal heart monitoring. [ ] --- • Normal progression of cervical dilatation. [ ] --- • The obstetrician requisite skills and experience. [ ] • Delivery at the CS room with anesthesiologist and neonatologist. [ ]

Medical conditions in pregnancy

Diabetes in pregnancy	
Complications	
Expected fetal complications	❑ Congenital anomaly (heart defects, skeletal anomalies and NTD). ❑ Macrosomia, Polyhydramnios. IUGR, IUFD (& perinatal and neonatal mortality). ❑ PROM, Pre-term birth and birth injuries. ❑ Neonatal complication (hypoglycemia, jaundice, RDS) .
Expected maternal complications	❑Recurrent abortion. Increased risk of infections. ❑ Superimposed PET, and GHTN ❑ Pre-term labor ❑ Operative delivery if she goes vaginally (there is risk for obstructed labor & maternal injury).
Pre-pregnancy investigations	
Investigation before pregnancy (baseline):	❑CBC, blood group. ❑ HbA1c, blood sugar monitoring. ❑ KFTs. ❑Screen for thyroid disease. ❑Urine analysis.
Consultation you should obtain:	❑ Ophthalmology ❑ Nephrology ❑ Cardiology
The proper gestational age for delivery	❑ 38-39 weeks. ❑ To decrease the incidence of still birth and fetal complications related to Diabetes.
What to do until she controls her blood sugar?	Effective contraception and folic acid 5mg supplementation and for the following 12 weeks of pregnancy.
COUNSELINGS:	
Pre pregnancy counseling:	1. Importance of diabetes control to avoid fetal abnormalities [ ] 2. Monitoring of blood sugar and HbA1c level [ ] 3. Should not get pregnant until glucose control optimal [ ] 4. Needs preconception dietitian visit [ ] 5. Prevention of Spina bifida: needs 5mg of folate daily [ ] 6. Combined team management required; obstetrician, Diabetic physician and dietician [ ]

	7. Base line investigations; CBC, KFT, Urine routine, blood group [ ] 8. Base line HbA1C level and screen for thyroid disease [ ]
Antenatal management (counseling)	9. Specialist/ obstetric unit experienced in management of diabetes [ ] 10. Detailed ultrasound required [ ] 11. Tight glucose control compared to non-pregnant state [ ] 12. More frequent antenatal visits compared to general population [ ] 13. Needs for fetal surveillance [ ]
Labor and delivery (counseling):	14. Timing and mode of delivery will depend upon fetal assessment [ ] 15. Keep glucose control optimal during labor [ ] 16. Vaginal delivery is possible, risk of shoulder dystocia [ ] 17. Baby special nursing care [ ] 18. Expectation of large sized baby should be in mind [ ]
Antepartum visit	
Tests	Routine ones: Labs and US. DM: HbA1C, blood sugar (post-prandial and fasting).
Admission	If abnormal readings.
Talk about the complications	Maternal and fetal (mentioned above).

Fetology:

Polyhydramnios / abdominal distention	
Differential diagnoses of increased abdominal size:	-Polyhydramnios. -Twin pregnancy. -Wrong date. -Uterine fibroids. How to differentiate mainly through the US (so it is the next step).
Causes	- Idiopathic - Maternal: Diabetes - Fetal: Intestinal obstruction. - Impaired fetal swallowing (anencephaly) -infections: parvovirus B19, rubella, and cytomegalovirus. -Anemia (high output cardiac failure).
Complications:	-Pressure symptoms (dyspnea). -PROM, cord prolapse, placental abruption, and preterm labor. -malpresentation, post-partum hemorrhage.
Physical findings	**Inspection:** - Distended abdomen - Shiny skin - Superficial dilated veins **Palpation and obs exam:** - Transmitted thrill - Abnormal lie and presentation - Difficult to feel the fetal parts
Investigations	- Detailed U/S examination. - OGTT. -CBC, blood group and Rh. -Detailed anomaly scan (rule out congenital abnormalities). -Viral screening if infection is suspected
Management	1- Expectant if not severe - Amnioreduction - Indomethacin** -consider dexamethasone for lung maturity. 2-Consider early delivery.

Vaginal bleeding as AUB:

How to evaluate bleeding in general	
History	Any medical disease / drug history Evaluate for hypothyroidism, HTN, DM. hematological diseases in general.
Physical	General to look to her condition Abdominal for any masses / tenderness. Local by PV & bimanual exam: to evaluate the uterus size, shape, direction, consistency, mobility/ Cervical mass, lesion, protruded lesion/ Adnexal masses.
Investigations	TSH, BHCG, tumor markers (CA125) US

Endometrial polyp	Symptoms intermenstrual bleeding
Important points to ask about in history of AUB	1. LMP 2. Pattern and timing of bleeding 3. Type of contraception and compliance if any 4. Vaginal discharge/itching/burning 5. Hot flushes, night sweats 6. Smear history 7. Medications, e.g., hormonal therapy, anticoagulants. 8. Past surgical and medical history
Differentials	1. Breakthrough bleeding due to hormonal treatment 2. Pregnancy related 3. Cervical or endometrial polyp 4. Cervical or endometrial malignancy 5. Perimenopausal dysfunctional uterine bleeding 6. Vaginal infections 7. Atrophic vaginitis 8. Bleeding disorders or anticoagulant use
Investigations	TVUS
Management	Hysteroscopy, D&C, and polypectomy

Why is it advisable to this treatment?	1. To relieve the symptoms 2. To obtain a histological diagnosis

Endometriosis	Comes with triad of pain, bleeding (intermenstrual) , and infertility.
History	1- Gravidity and parity. 2-Pain duration, character, site, intensity, relation to her cycle. 3-period: regular, amount, intermenstrual bleeding. / Dyspareunia. 4-contraceptions and pregnancy. 5- Past medical, surgical history. 6- Family and social history.
Examination	General, abdominal, and local.
Investigations	1. Ultrasound evaluation may indicate adnexal mass of complex echogenicity. 2. Elevated level of CA 125. 3. Laparoscopy. 4. Laparotomy.
Differentials	Pelvic inflammatory disease (PID) (chronic one) Ovarian cysts or tumors (rupture or torsion or hemorrhagic-corpus luteal cyst-). Recurrent acute salpingitis. Uterine myomas (red degenerated fibroid)
Symptoms	1. Dysmenorrhea. 2. Dyspareunia. 3. Dyschezia. 4. Premenstrual and postmenstrual spotting. 5. Infertility.
Risk factors	1. Early menarche. 2. Congenital anomalies of the genital tract 3. Short menstrual cycles 4. Low body mass index 5. High socio-economic status.
Points to take into consideration for	***1. The certainty of the diagnosis.*** ***2. The severity of the symptoms.***

management planning	***3. The extent of the disease.*** ***4. The desire for future fertility.*** ***5. The age of the patient.*** ***6. The threat to the gastrointestinal or urinary tract or both.***
Treatment options for the pain	**1. Expectant;** limited role. **2. Medical:** 1. NSAIDs drugs 2. Low dose OCPs. 3. High dose progestins. 4. Danazol 5. GnRH analogues. **3. Surgery:** 1. Surgical excision of endometriotic lesions 2. TAH, BSO.
Theories	**1. The retrograde menstruation theory.** **2. The mullerian metaplasia theory.** **3. The lymphatic spread theory.** **4. The immunologic changes.**

Fibroids	
Differentiation	<table><tr><th>Fibroid site</th><th>Symptoms</th><th>Surgical treatment type</th></tr><tr><td>Submucosal</td><td>Intermenstrual bleeding</td><td>Hysteroscopic resection</td></tr><tr><td>Intramural</td><td>Menorrhagia</td><td>Myomectomy</td></tr><tr><td>Subserosal</td><td>Pressure symptoms, pelvic pain</td><td>Laparoscopic myomectomy</td></tr></table>
Treatment	Surgical → mentioned above. Medical → 1. GnRH analog (Decapeptyl) 2. Uterine artery embolization
Pregnancy complication of the fibroid	1. Pain (red degeneration) 2. Miscarriage 3. Malpresentation

	4. Classical cesarean section 5. Postpartum hemorrhage 6. Preterm labor

Adenomyosis	
Symptoms	• Menorrhagia. • Prolonged menstrual cramps (dysmenorrhea). • Intermenstrual spotting. • Pressure symptoms; bowel and urinary. • Painful sexual intercourse. • Tenderness in the lower abdominal area. • Anemia.
Risk factors	• Being in her mid-40s. • Having children. • Had 2 previous surgical deliveries.
other gynecological problems could be associated with adenomyosis	• Infertility. • Endometriosis.
Differentials	Intramural fibroid and adenomyosis.
How to differentiate	TVUS. MRI.

Infertility

Secondary infertility		
History	- Cycle details - Galactorrhea - Hirsutism - Previous obstetric history - PPH - Puerperal pyrexia - History of Curettage - Contraception - PMH, PSH, FH	
Investigations	- Serum progesterone level in mid luteal phase, TSH, prolactin. - HSG or hysteroscopy - Ultrasound	
Diagnosis	- Asherman's Syndrome - Hysteroscopic removal of adhesions and estrogens to promote growth of endometrium	
Primary infertility		
Counselling	**1. The chance of their pregnancy in the first 2 years:** - 50% will conceive in 3 months. - 75% will conceive in 6 months. - 90% will conceive by one year. - 96% will conceive by 2 years.	**2. The most common causes for this failure of pregnancy:** - Ovulatory disorders: 27% - Male factor: 25% - Tubal disorders: 22% - Unexplained: 17% which can rise to 20%; (10-20%) - Endometriosis: 5% - Others: 4%
History	**-Both as couples:** age, time of infertility, past obs, Regular intercourse. **-Female side:** gynecological, other differentials, past medical, surgical, obs. **-Male side:** past medical and surgical. **-Previous doctors:** investigations, treatment (assisted reproduction).	
Physical examination	**For both.**	
Investigations	**1- Female:** **- Blood test for hormonal profile**	**2- male:** **- Semen analysis**

	(FSH, E2, AMH, Progesterone mid-cycle/TSH, PRL). **- Ultrasound test for the uterus and ovaries (TVUS).** **- Hysterosalpingogram.** **-Diagnostic laparoscopy.** **- Chlamydia test** **- Karyotyping.**	**- Blood test for hormonal profile** (FSH, Testosterone). **- Ultrasound test for the testes.** **- Chlamydia test** **- Karyotyping**
Management	1. Induction of ovulation and time intercourse 2. IUI 3. IVF	

Other notes	
How can you confirm the ovulation?	• Serum progesterone level on day 21 of the cycle. • Basal body temperature. • Transparent vaginal discharge. • Abdominal pain. • Breast discomfort.
Fertility checklist 3	
What are the main possible male causes?	1. Smoking. 2. Tight underwear. 3. Exposure to environmental hazards and toxins. 4. Excessive stress.