Arab Board session 4

List of Topics

1. URODYNAMICS
2. ROLE OF ST1/ST5
3. POSTOPERATIVE CARE
4. SHOULDER DYSTOCIA
5. SECOND STAGE C SECTION
6. POP-Q CLASSIFICATION
7. Pessary insertion
8. Shoulder dystocia
9. 2nd stage CS
10. OSATS
11. 3 rd. stage of Labour
12. Retained placenta
13. MROP
14. Maternity Dashboard
15. Knot tying
16. Forceps vaginal delivery
17. Shoulder dystocia
18. Killeand”s forceps
19. Forest plot
20. Episiotomy
21. FBS
22. Endometrial ablation
23. Deeply impacted head at 2 nd stage C.S
24. CTG
25. Breech delivery
26. Veress needle
27. Neonatal resuscitation
28. Mechanism of Labour

29. Audit of colposcpy referrals
30. Audit
31. Discharge letter.
32. MDT
33. Cochrane review
34. RECALL-BRIDGING ANTICOAGULATION
35. Post Op notes.
36. Mirena Insertion.
37. Colposcopy
38. Eclampsia
39. Pudendal block

UROGYNAECOLOGY and Pelvic Floor Disorders.

Urogyne history & exam

- ***Intro:***

  I understand that you are here today because you've problems with your waterworks, is that true? So, If you don't mind I need to ask you few Q, may need to examine you & run some tests, then we will talk about your management options. Is this ok with you?

- ***History of presenting illnes:***

  Age, duration, description [tell me more….],
  how many times do you need to go pee [day & night],
  need to rush?,
  leak [wet your self] with "efforts"?,
  difficulty passing urine?
  Any bloods?

Tell me about your drinking habits [approximate: how many bottles of water, cups of coffee],

Is it affecting you-the way you live & the way you look at your self or your sexual life?

Tried anything?

Any associated bowel problems?

You fell something coming down?,…

-
- ***Gyne***:

  LMP, any problems with periods, smears.
- ***Obs:***

  Number & types of deliveries. Also child bearing wishes [if of age].
- ***PMH*:**

  Diabetes [controlled?], hypertension. What drugs. Chest problems [cough], constipation, Other conditions eg heart [pacemakers].
- ***PSH***:

  Any incontinence or POP surgery in the past
- ***FH*:**
- ***Social****:*

  Smoking, alcohol, drugs. What do you do for a living. Where do you live [specially if elderly], need support?
- ***Allergies***: ?

O/E:

- Wt [BMI]
- Vitals
- Chest
- Abd: masses [including fibroids], palpable bladder
- Speculum [sims]: leak with cough, POP, atrophic vagina,tone.

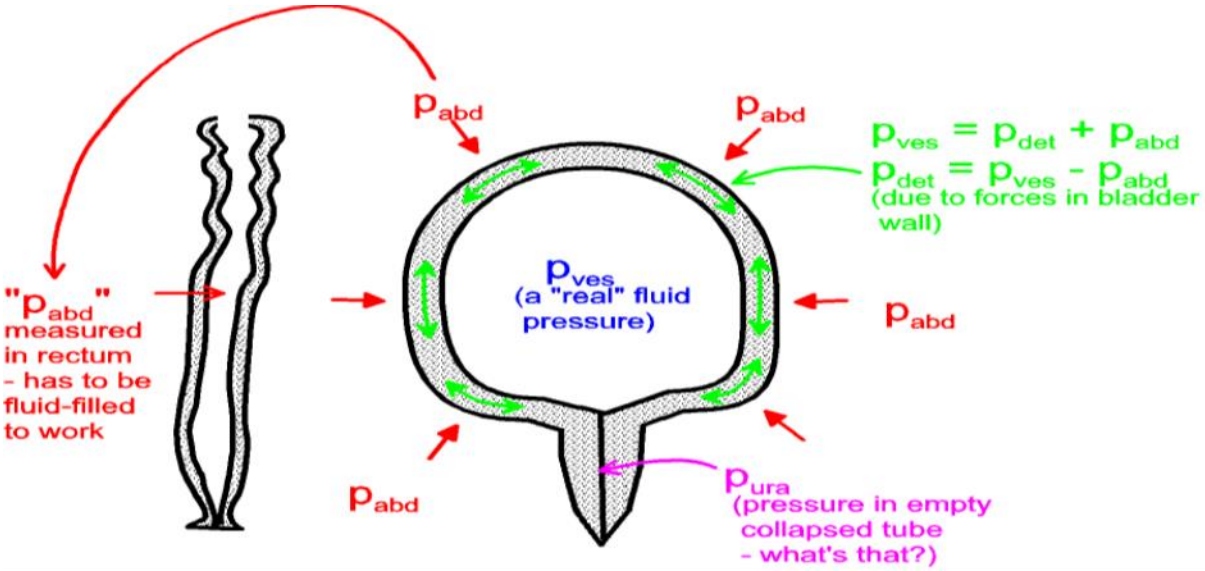
Invest:

- Diary
- Urine dipstick ± culture
- ±US
- ± Urodynamics [you can say: further results depends on ……..]

Mng:

- life style [reduce Wt if BMI>30, stop smoking, reduce alcohol/caffeine, modify drinking], physiotherapy/continence advisor, medicines, pessary & finally surgery. Remember pessary & bulking agent [glue like substances injected inside your water pipe] as measures till family complete.

- Lay definitions [NICE]:
  - ✓ Urinary incontinence is when you pass urine when you do not mean to.
  - ✓ 'Stress incontinence' happens when your pelvic floor muscles [bladder support] are too weak to stop you urinating, especially during exercise or if you cough, laugh or sneeze.
  - ✓ 'overactive bladder': when the bladder tells your body that it wants to empty before it is full & when the bladder muscle starts squeezing to empty out urine more than normal, or when you don't want it to.
  - ✓ Urgency: sudden desire to pass urine which cannot be deferred,
  - ✓ Frequency: passing urine often
  - ✓ urge incontinence (urinary leakage associated with urgency).



The battery of tests that measure bladder function are called cystometrics.

There are 2 types –

1.Simple

2.Multichannel

Simple – it is inexpensive and helps to determine SUI and DO. It also determines measurement of first sensation, desire to void, and bladder capacity. But it will NOT measure ISD (intrinsic sphincter defect).

Multichannel– in addition to all that simple cystometrics determines it also helps to diagnose ISD.

Procedure– testing is performed with the woman standing or sitting on a specialized chair.

Initially women are asked to empty their bladder into a commode connected to a flowmeter (uroflowmetry). After a maximal flow rate is recorded, the patient is catheterized to measure postvoid residual volume.

Then two catheters are used one placed in bladder and one in vagina or rectum . The bladder is filled with room temperature

sterile normal saline,

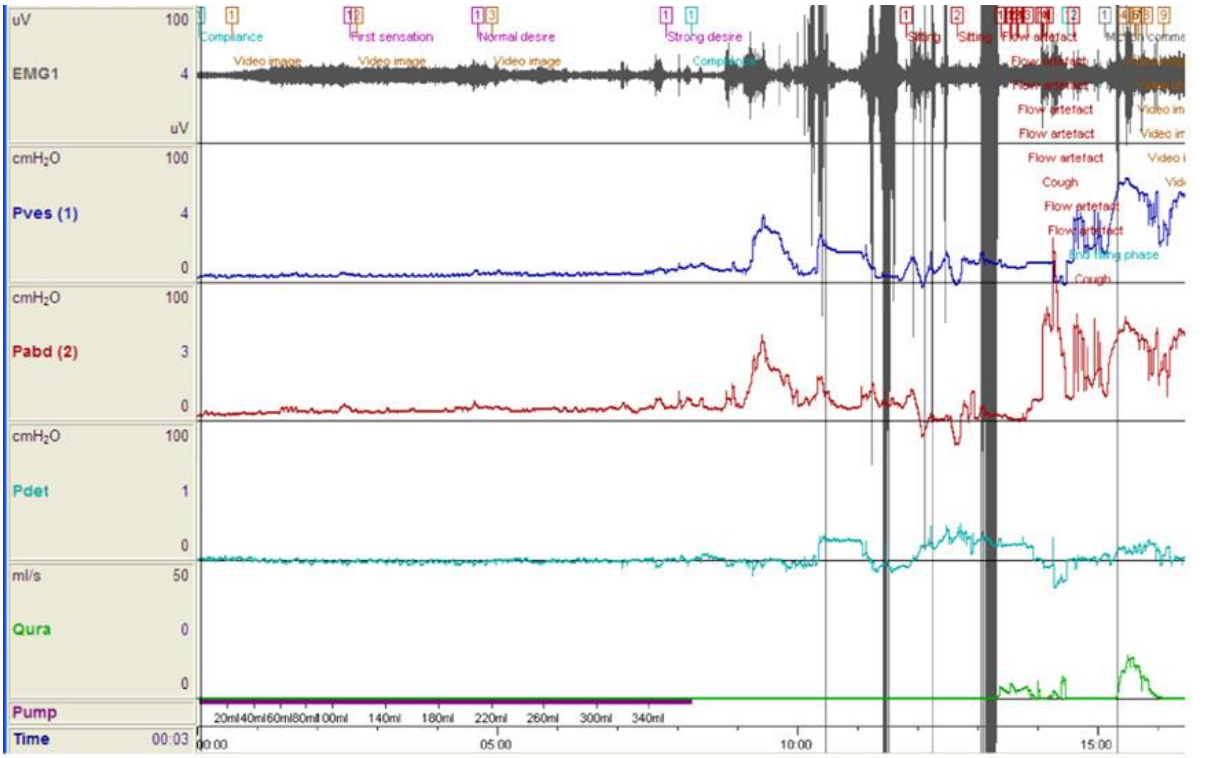
and the patient is asked to cough at regular intervals.

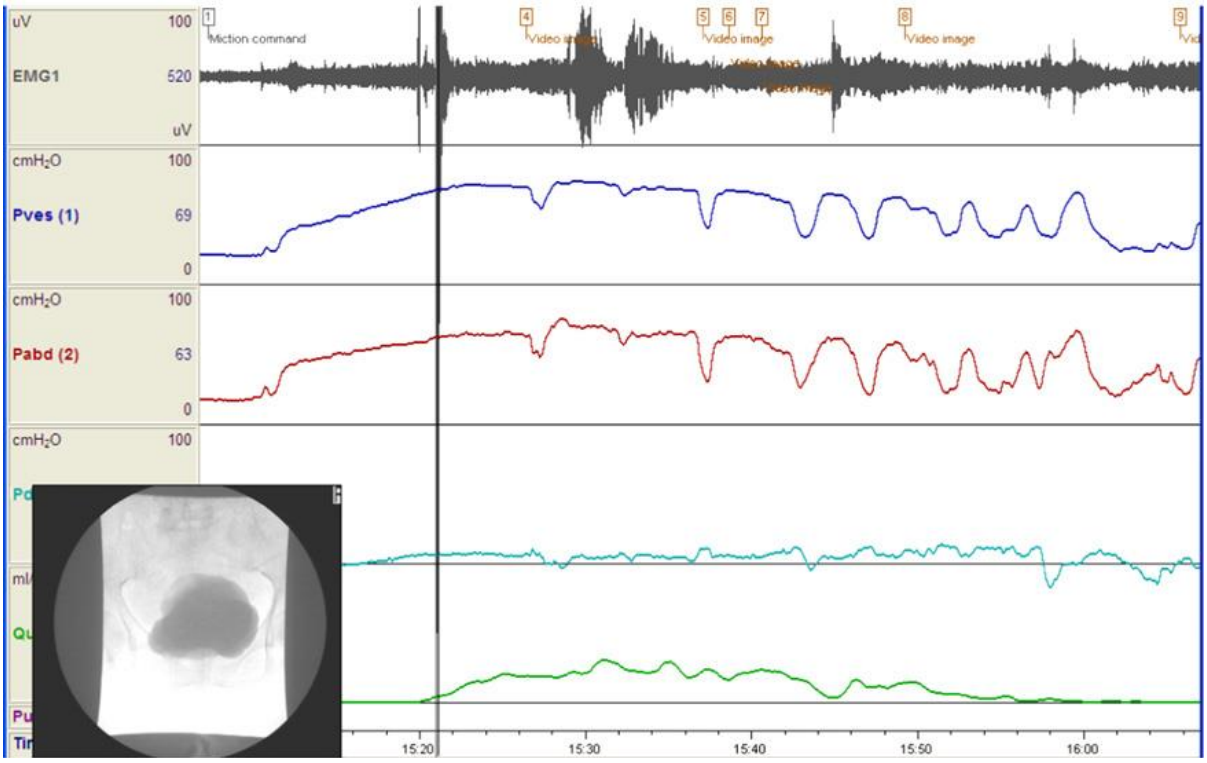
Additionally, during filling, the volumes at which a first desire to void and maximal bladder capacity is reached are noted.

These two catheters give us the following measurements

1intraabdominal pressure,
(2) vesicular pressure,
(3) calculated detrusor pressure,
(4) bladder volume, and
(5) saline infusion
flow rate.

Now in the graph there are three lines given.
Trace A is abdominal pressure. (pressure in the abdomen while coughing / straining etc). Sometimes this can be seen during rectal peristalsis too.
Trace B is vesical pressure. (pressure inside the bladder cavity)
Trace C is detrusor pressure. (pressure in the wall of the bladder)
The graph also has two parts – first part is the filling /storage phase . The second part is the voiding phase. Based on where the abnormality is noted it is termed as storage defect or voiding defect.





Tension-free vaginal tape (TVT) is the most commonly performed operation for stress urinary incontinence in the UK.

- Described by Ulmsten in 1996 with over 1 million operations worldwide
- Uses knitted 11 mm × 40 cm polypropylene mesh
- Inserted transvaginally with two supra-pubic exit points
- Many women go home on the same day
- Can be done under local, regional or general anaesthetic
- Complications:
  - short-term voiding difficulties
  - bladder perforation (0.9–25%)
  - de novo urgency (0.2–15%)
  - bleeding (0.9–2.3%)
- Long-term results confirm durability of success rates.

> Midurethral tapes, using a 'bottom-up' approach with macroporous type 1 polypropylene meshes, are recommended as a treatment option for stress urinary incontinence if conservative management has failed.
>
> These are considered to be the gold-standard procedure for surgical treatment of stress urinary incontinence. Open colposuspension or autologous rectus fascial slings are the recommended alternatives when clinically appropriate.
>
> Synthetic slings using materials other than polypropylene that are not of a macroporous (type 1) construction are not recommended for the treatment of stress urinary incontinence.

- Retropubic midurethral sling is equivalent to transobturator midurethral sling for subjective cure
- Retropubic is better than transobturator slings for objective cure
- transobturator slings are associated with less blood loss, bladder injury and voiding difficulties
- Retropubic midurethral sling is better in intrinsic urethral sphincter deficiency, severe urinary stress incontinence, and previous failed stress urinary incontinence surgery
- Retropubic and transobturator slings are equivalent in >80 years and mixed urinary incontinence
- Mini-slings are inferior in efficacy to midurethral sling
- Do not use a 'top-down' approach, multifilament sling.

TOT…

- .Despite its high success rates, the TVT has not been without serious complications and this has lead to the search for alternative routes using similar materials but with exit (or some cases, entry) points via the obturator foramen.
- In 2001 Delorme described a new method of inserting the tape which passes through the obturator foramen; thus, theoretically, avoiding some of the complications such as bladder perforation. In the TOT (outside–in) technique, after the initial anterior vaginal incision and dissection, the tape is introduced from the skin on the obturator foramen and comes out in the vaginal incision (Delorme et al 2001).
- In the TVT-O technique the needle is passed in a reverse route, i.e. in from vaginal incision and out through the obturator foramen (inside-out) (de Leval 2003). In the preliminary study, Delorme showed that there was a high success rate, no bladder perforations and few perioperative complications via the transobturator route and this procedure was subsequently widely adopted and has good evidence base. TVT-O uses the same mesh as the TVT. and has some theoretical advantages in that instead of a blind pass into the retropubic space, the introducer passes through the obturator foramen but – of course – nerve and vessel damage remain as potential complications of the procedure

Adverse events such as bladder injuries and haematomas were less common in the transobturator tapes than TVT. Voiding difficulties (OR: 0.61; 95% CI: 0.35–1.07; and OR: 0.81; 95% CI: 0.48–1.31 TOT and TVT-O, respectively) were lower in transobturator tapes but this did not reach statistical significance. Groin/thigh pain and vaginal injuries were more common in the transobturator tapes. Mesh erosion was equivalent in tapes inserted by transobturator and retropubic route.

POP Q classification

Introduction

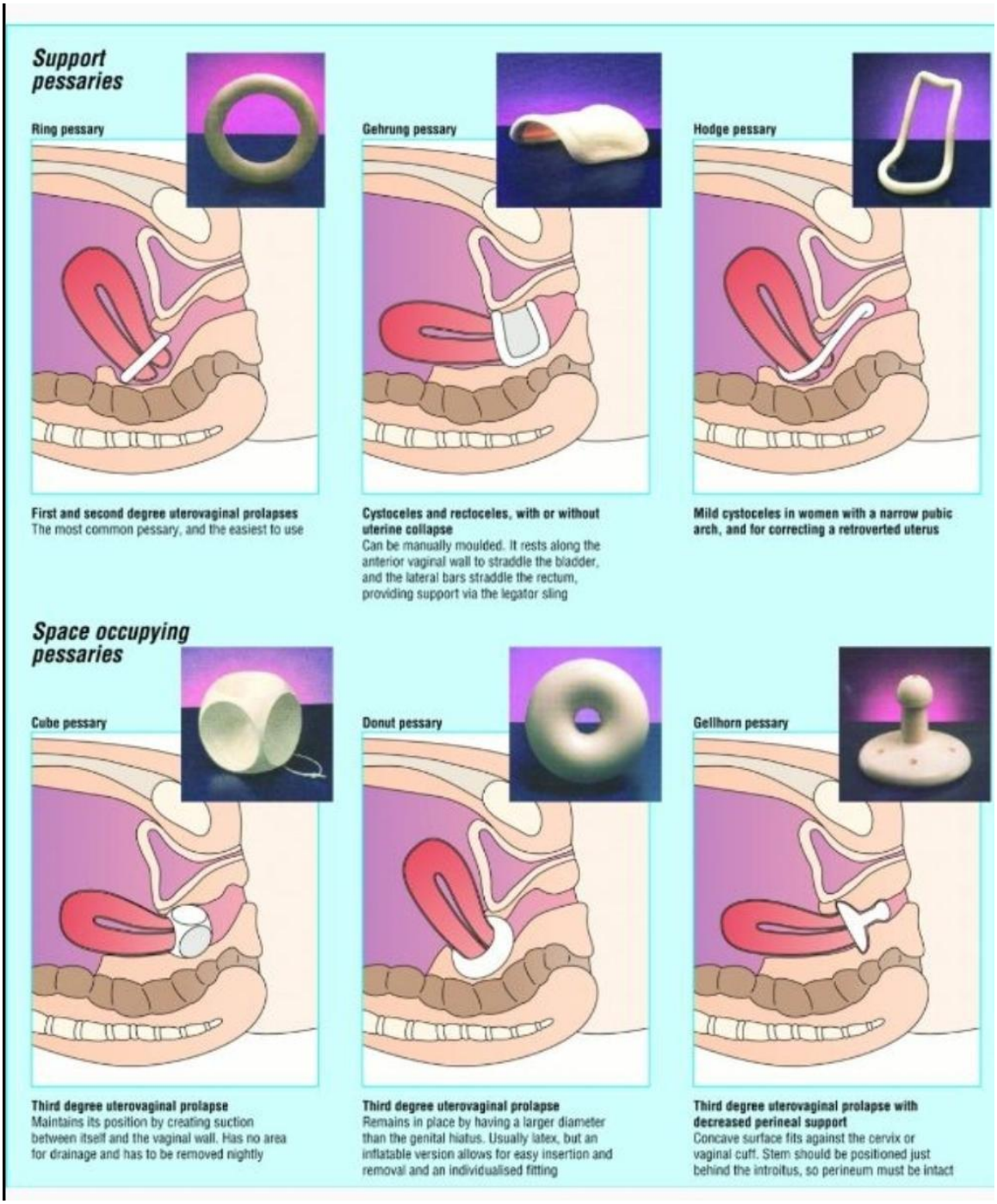
Situation awareness

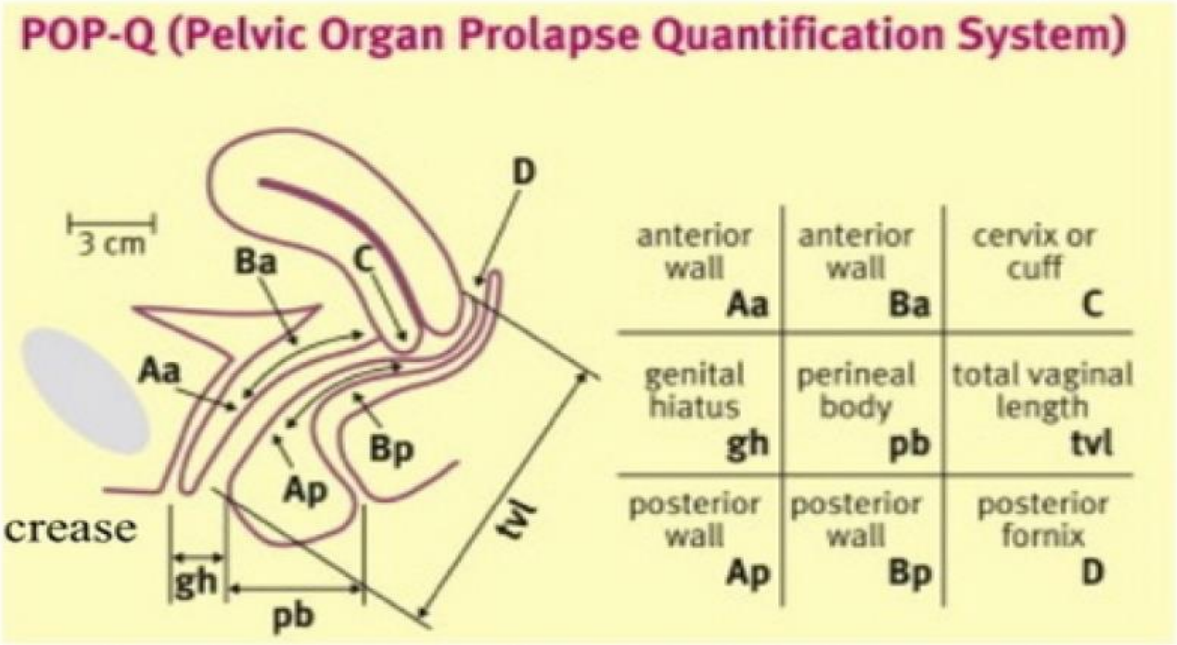
Background knowledge

Agenda

Purpose of Pop.q

We can use it everyday with patient counseling to give them a better understanding in their condition and to do so in a much more effective time period about Pelvic anatomy and urinary incontinence.





Stage 0 No descent of pelvic structures during straining

Stage 1 The leading edge of the prolapse is >1 cm above the hymenal ring

Stage 2 The leading edge of the prolapse extends from 1 cm above the hymen to 1 cm below the hymenal ring.

Stage 3 The leading edge of the prolapse extends to between 2 and 3 cm below the hymenal ring, but there is not complete vaginal eversion.

Stage 4 The vagina is completely everted

Ok, we have this nice illustration of the pelvic anatomy. Lets start with description of prolapse.

This is a diagram of all the pop Q points, now the pop Q system stands for pelvic organ prolapse quantification and it's the internationally accepted objective way of describing pelvic organ prolapse first published by Rich Bump and others in 1996, so here we have all of the pop Q points in a first glance

this can look very cumbersome or too complicated for many clinicians in fact a lot of people don't use the pop Q system because this diagram right here can be very daunting but if I break it down step by step it becomes a little easier

so along the way when we are measuring the pop Q points for a given patient, we need to do so in increments of one centimeter or less, so we need a ruler mark off one centimeter increments.

so let's start with what these things mean, so most of these pop q points are derived in relation to a reference point that reference point is the introits, so things that are on the inside are given negative values and things on the outside are given positive values, so you can kind a remember it like golf, negative numbers are good positive numbers are bad. Things are falling out they are going to be given a positive number,

let's use the easiest example first. Point C stands for the cervix or the cuff, whichever applies .When you are measuring point C you ask the patient to cough or strain or whatever it is that would bring their prolapse down and you measure the distance from point c which is the cuff or cervix to the opening of the vagina for example is point c came down to with in one centimeter of the opening then it would be given a score of negative one. If it comes down beyond the opening one centimeter, you give it a score of positive one.

Okay, can you point out where is point c???excellent

the next point to conceptualize is point a as you can see from the screen here there's a point a of the anterior wall which is AA and there's point a of the posterior wall which is called AP but they are basically the mirror image of one another point.

AA is a set point three centimeters inside the vagina along the anterior vaginal wall, the way that I explain is this way let's pretend you had a little tiny man and he is one of those surveyor guys. I am a highway and he has got on of those surveyor wheels and he starts walking at the urethral meats and he's marching up the interior vaginal wall and he was to make a little X three centimeters up. What you do as a clinician is you kind of do that in your mind you measure along the anterior wall and you focus your eyes on that point that is three centimeters up and when the patient is bearing down or coughing you watch where that point comes in relation to the opening of the vagina so if that point Comes flush with the opening it would be given as a score of zero. If it didn't move at all, the best it could possibly be is negative three and if it came all the way out, the patient had a total prolapse then the worst it could possibly be is positive three so that point AAA can vary between positive three and negative three, with negative three being the perfect support.

Point Ap is the same exact thing simply except on the posterior side. That little tiny man this time is marching up from the posterior forchette and making his little mark three centimeters inside the opening of the vagina there so as a doctor you do that you met you measure probably with your little three centimeters focus on that point and then determine when the patient is bearing down where that point comes in relation to the opening of the vagina

so there's three pop q points that can only be positive numbers. These are actual measurements, they aren't in relation to the opening of the vagina, they are measurements so these are

@ TVL which stands for total vaginal length typically is just gonna be the doctors making the vagina as long as it can be using the speculum and you get the measurement with your ruler and the usual number is going to be something like eight to ten centimeters or something like that.

@Then, there's PB that stands for perineal body that the measurement from the posterior forchette to the anus there's GN that stands for genital hiatus that's going to be from the posterior forchette to the urethral meatus

the **B points** are here and here, these are the B of the anterior wall which is called BA and B of the posterior wall which is called Bp. Now, these B points are really just put in the system to represent the worst prolapse in that particular segment so B of the anterior wall is really just asking you a question as a doctor it's asking you is anything worse than the A point, if u say no to yourself, if the a point is also representative of the worst prolapse in that segment, then your b score is going to be the same as your a score. In other words, the question that that the b score is asking you is what's the worst prolapse of the anterior wall and if your answer in well nothing is worse than that a point, then you just make them the same number. However, if, let's say the patient has complete procidential so her a score aa is plus three the B score is going to be still on long the anterior vaginal wall, there's going to be something worse than plus three and that's going to be the number that you put in there so for in that example of complete Procendentia there a score might be plus three and the b score could be something like six or seven and then the seed point can even be beyond that. That same argument can be made on the posterior side, exactly the same, it's just a mirror image, so again you are just asking yourself what's the worst prolapse in that posterior side if that number is the same as the a number then u record them as the same thing but if something bulges beyond whatever value you gave to the a point then, u simply record that. The reason these numbers exist, I think, is because slings exist so often times a sling will be placed right at the

negative three position that would mean that the a point AAA was negative 3 was the best it could possibly be however the patient still has prolapse of the anterior vaginal wall which would curl around that sling and even be a positive number so it's possible to have a negative 3 AAA and a positive number of the a score where it's hanging out say two centimeters for example would be a symptomatic anterior wall prolapse .

OSCE stations

1- you are working as R5 , called to see a 22 year old post -partum patient , with inability to pass urine 6 hours after SVD.How will you assess her .

2-A 54 year old p3 ,with diabetes is complaining of increased frequency of urination for last 6 months.She was sent for pelvic floor muscle training 4 months ago but her symptoms have not improved.How will you manage her ?

3-A 72 year old woman has increased frequency ,urgency .urge incontinence with nocturia.How you will assess her condition ? How to manage her ?

4- A 69 year old lady has come to you in the clinic as she is feeling a lump down below.She had a

Vaginal hysterectomy 12 years ago .

How will you assess her ?

How it could have been prevented at the time of surgery ?

What will you do if she is unfit for surgery ?

Pessary

Hello, I am Nadira Rehman, one of the registrars of the clinic. Good morning, please have your seat. Whats your name ???Hi I am john. Thanks.

How is your rotation going on?

-That's fine, yesterday I saw one vaginal pessary insertion, could we have discussion on it? Sure, john do u know why vaginal pessary is used and how?

-Not that much, just I know it is used in prolapse .Exactly, you are right,

It is device inserted in vagina for pelvic organ prolapse and also in incontinence.

POP ...one or more organ slips down from their position and bulge in vagina& for prolapse sometimes there is lack of voluntary control over urination leading to incontinence. There are details of prolapse stage& incontinence types, will talk later on. Let's talk about pessary today

is that ok? -Yeah

POP causes bulge, discomfort, urinary, bowel problems as well as sexual difficulties.

Vaginal pessary is plastic or silicone device placed in vagina stretches its walls &hold soft tissues up so as to prevent uterus & vaginal wall from bulging.

Indications

- ✓ It is used when patient chooses this option over surgery.
- ✓ Patient wishes to retain fertility.....
- ✓ in pregnancy...
- ✓ Patient wants it temporary before surgery to heal ulcer dt big prolapse or
- ✓ Other comorbidities contraindicating surgery...

contraindications

- ✓ active infection,
- ✓ noncompliance neglect
- ✓ latex allergy

They are of different types &sizes. right type is judged after examination. This is like trying pair of shoes & number might be tried before right size identified.

About types **support pessary** (ring MC), **space filling** (Gel horn MC)

Support pessary – easy to insert & removal, pt. is able to do sex intercourse. Insertion of ring pessary is done by folding it in half and inserting it with curved side up. Once in the vagina, the ring opens up, the lower rim of the pessary would be placed behind pubic symphysis. Removal of pessary is an easy one, like hooking the pessary edge with index finger.

There are some other lever pessaries (smith, Hodge) used to Rx uterine retroversion, prolapse, cystocele.

Space filling pessary (gel horn, cube, donut)- primarily used to support severe pelvic organ prolapse sp. Post hysterectomy vaginal vault prolapse, they have larger bases to support vaginal apex, so more difficult to insert and remove and sex intercourse is not possible while pessary in situ. Folding one side of the base to the stump.

Gel horn pessary is inserted vertically inside the vagina, non-dominant hand separates the vagina, the pessary is pushed upwards until the tip of stump is just inside the vaginal Introitus.

Removal of gel horn pessary is facilitated by pulling the stump while the opposite hand is inserted beneath the edge of pessary base.

-Just after pessary fitted pt. can go home?

You need to confirm that pessary is fitted properly. You can ask pt. a short walk to make sure pessary doesn't cause any discomfort/slip. You can ask her to go to toilet to make sure it doesn't cause problem in urination. If the pessary falls out / feels tight, it can be replaced accordingly.

-Does she need any F/up?

Yeah, pessary needs to be replaced and checked if it is working properly every 4-6 months. You can discuss any concern she may have.

-Are there any risks?

There are risks but fortunately these are rare. Pessary can some times push into vagina and cause ulcer/ raw area. If it is left despite of ulcer- ulcer can get bigger and pessary may cut through bladder/ rectum with potential serious complications. If in F/up you find an ulcer, pessary shouldn't be replaced and estrogen cream to apply on sore area for healing. She should F/up 2-4 weeks later, if no ulcer, you can insert a new pessary. She may complain of bleeding because of ulcer, if not for ulcer its necessary to rule out anything wrong in uterus by an USG/ Endometrial biopsy.

Occasionally the pessary is too small/prolapse may be getting worse, sometimes pelvic floor muscles are not strong enough in which case surgery may be a better option. Sometimes it can be difficult to remove which may need anesthetic to reduce pain

So, I think I have covered basics related to pessary. Do you have further questions?

I will give you website link related to pessary. You can go through YouTube videos Thanks.

FEEDBACK