ERODE OBSTETRIC AND GYNAECOLOGICAL SOCIETY
ACADEMIC MEET

02.00-02.45 pm Difficult situations in breastfeeding and management.

Speaker : Dr. **Sambasivam**. MD Paed
Central Co-ordinator,
Newborn and young child feeding foundation,
Kumbakonam.

02.45-03.00 pm 10 words you should not utter in front of breast feeding mothers.
Dr. **R. Selvan** DCH, DNB,MRCPCH(UK)
Lotus hospital , Erode.

03.00-03.45 pm Brief discussion on EMTCT (Elimination of Mother to child transmission of HIV)
Dr. **Chandra Sekaran**, M.B.B.S., F.H.M
(Fellowship in HIV Medicine ,CMC,
Medical Manager, TN-PPP-SAATHII, Chennai.

03.45-04.00 pm Discussion

Date : **28.07. 2019, Sunday**
Time : **1.00 pm - 4.00 pm**
Venue : **IMA HALL,**
Sampath Nagar, Erode.

Lunch : 1.00 pm - 2.00 pm

PRETERM LABOUR

When a patient presents with preterm labour pain, the first step is to confirm the diagnosis.

Initial assessment

- Admit the patient to labour room.
- Review the patient's past and present obstetrical and medical history.
- Accurate assessment of gestational age based on Ist trimester USG to be done.
- Evaluate the symptoms & signs of PTL.
- Monitor maternal vitals.
- Electronic Fetal heart rate monitoring.
- Assessment of contraction: frequency, duration and intensity.
- Abdominal examination to assess fetal size, presentation and uterine tenderness.
- Speculam examination to assess cervical dilatation, presence of uterine bleeding, leaking P/V, & also to obtain cervicovaginal fluid swab.
- Per vaginal examination to assess cervical dilation & effacement after excluding placenta previa & PPROM .
- Transvaginal USG - for cervical length measurement.
- Obstetrical USG examination - to assess fetal presentation, AFI & fetal weight.

Management of a case of preterm term labour at < 34 weeks with intact membranes?

Do's & Don't's:

Do:

1. Admit.
2. Administer corticosteroid.
3. Tocolytics for upto 48hrs to delay delivery, for steroids to act or in utero transfer to a tertiary care centre.

4. MgSO4 for neuro protection between 24-32wks gestation.

Don't's:

1. No role for antibiotics in the absence of documented infection.
2. No progesterone supplementation for the treatment of acute preterm labour.

Role of antenatal corticosteroids in preterm labour :

1. Single course (2 doses) of corticosteroid is recommended by ACOG (2017a) between 24-34wks who are at risk of delivery within 7 days.
2. Both Betamethasone and Dexamethasone can be used.
3. The dose of Betamethasone 12mg IM 2 doses 24 hrs apart.
4. Dexamethasone 6mg IM, 4 doses, 12 hrs apart.
5. It decreases the incidence and severity of respiratory distress syndrome, intraventricular haemorrhage and necrotizing enterocolitis in newborn.
6. Repeated courses of corticosteroids are not recommended as it can cause cerebral palsy due to cerebral demyelination and FGR.
7. RCOG recommends antenatal corticosteroids for all preterms <35wks and for all elective cesareans upto 39 wks of gestation.
8. Single rescue dose (salvage therapy) of ANC is recommended in women <34wks gestation and whose initial course was given <28wks and expectant delivery within the next 7 days.

Tocolytics :

- Tocolytics are given to delay the delivery by atleast 48hrs for the antenatal corticosteriods to act and to achieve maximum fetal/neonatal benefits. It enables the safe transport of mother to a tertiary care center.

- Tocolytics decrease the intensity & frequency of uterine contractions. Ideal candidates are patients in early acute PTL with cervical dilatation <3cm.

Contraindications for tocolytics

1. Intrauterine fetal demise
2. Lethal fetal anomalies
3. Non - reassuring fetal status
4. PE (non severe/ severe) or eclampsia
5. APH with haemodynamic instability
6. Chorioamnionitis
7. Medical contraindications to the tocolytic drug.

Classes of tocolytic agents:-

- Calcium channel blockers
- NSAIDS
- Beta mimetics
- MgSO4
- Nitric oxide donors
- Oxytocin receptor antagonists.

MgSO4 for neuroprotection

- Most effective between 24-32wks gestation.
- Indicated when delivery is expected within the next 24hrs.
- It decreases the risk of cerebral palsy and severe motor dysfunction in the neonate .

Dose

- 4gm IV loading dose over 30mts followed by 1gm/hr infusion for 24hrs or until delivery whichever is sooner .
- It can be repeated when PTL recurs later.
- Indomethacin is the drug of choice when MgSo4 is used for neuroprotection.
- Better avoid nifedipine & beta mimetics along with MgSO4 to avoid serious maternal side effects.

DRUG	MOA	DOSAGE	SIDE EFFECTS	CONTRAINDICATION
CALCIUM CHANNEL BLOCKER	Prevents calcium entry through the cell membrane channels - results in decrease in the intracellular free calcium.	Loading dose: 30mg Maintainace dose: 20mg 8th hourly Maximum dose : 180mg/day		Should not be given with magnesium sulphate as it causes respiratory
Prostaglandin synthetase inhibitor	Non specific cyclooxygenase inhibitor	Loading dose: 50mg maintenance dose 25mg every 4hrs for 48hrs	Not recommended after 32 wks of gestation as the fetal side effects are more	>72hrs of use can cause premature closure of ductus arteriosis & oligohydramnios
Ritodrine, terbutaline, isoxuprine	Beta adrenergic receptor agonist	250 microgram subcutaneous	Maternal hypotension, tachycardia and pulmonary edema	
Magnesium sulphate	Calcium channel blocker	Loading dose : 6gm IV for 20 mns Maintenance dose: 2gm/hr for 24 hours	Maternal hypotension	Short term inpatient use only. (ACOG)
Atosiban	Oxytocin receptor antagonist	Loading dose: 6.75mg Maintenance dose: 18mg/hr for 3 hours followed by 6 mg /hr for 45 hours	Has low efficacy and expensive	Myasthenia gravis, cardiac conduction disorders

Management of women after resolution of acute PTL

1. Suggest out patient management-hospitalisation in women with advanced cervical dilation and when they stay far away.
2. Do not recommend bed rest.
   Women at risk for PTB should limit the physical activity like heavy lifting in pregnancy.
   High risk patients should avoid >40hrs of work per wk, night work & prolonged standing.
3. Avoid sexual activity.
4. Routine Fetal fibronectin testing and Home Uterine Activity Monitoring devices are not useful. (ACOG)
5. Cervical pessary is used only in the context of a clinical trial.
6. No maintenance tocolysis is required.
7. No prophylactic antibiotics.
8. No new initiation of progesterone supplementation.

Women with past history spontaneous preterm birth

Key investigation is USG assessment of cervical length.

Management

1. Progesterone in prevention of PTL
   - Use of progesterone therapy for prevention of PTB in select women with singleton pregnancies. (ACOG 2016a) & SMFM (2017a)
   - The criteria are H/o prior PTB or no PTB but with a USG diagnosis of short cervix.

17 hydroxy progesterone caproate

- Is a synthetic progesterone.
- It is the Ist and only drug approved by FDA for prevention of recurrent PTB.
- Dose is 250mg IM wkly from 16wks and continued till 36wks.
- SMFM (2017a) recently reaffirmed the use of 17-OHPC than vaginal progesterone for prevention of recurrent PTB.

2. Cervical cerclage

- ACOG (2016c) recommends to consider cerclage in singleton pregnancy with prior SPTB <34wks and CL <25mm and gestational age <24wks.

- Without a prior SPTB ,cerclage for USG detected short cervix offers no advantage.
- No role for cerclage in multiple pregnancy.
- Vaginal progesterone but not 17-OHPC appears to benefit in USG detected short cervix . The dose is 200mg vaginally daily or 90mg vaginal gel daily.
- Vaginal gel is better than suppository as it has superior acceptability and tolerability.

Ineffective interventions in preterm labour

1. Antibiotic therapy.
2. Bed rest - No benefit in PTL. It increases the risk of thrombo embolism.
3. Nutritional supplimentation,hydration,sedatives have no role.
4. Cervical cerclage is not useful

   - in patients with prior PTL with normal cervical length in the present pregnancy .

   - In women with short cx in the present pregnancy with no h/o PTB in the previous pregnancy.

   -No role for cerclage in multiple pregnancy.
5. Progesterone supplementation.
6. Cervical pessaries .No proven benefit .But silicone pessaries (Arabin pessary)can be used in patients with short cx < 25mm.SMFM 2017b currently recommends pessary prophylaxis only within research protocols.

Management of active preterm labour with cerclage insitu

1. Remove the cerclage - otherwise cervix may cut through or cervical tears can occur.
2. Ante-natal corticosteroids.
3. Tocolytics for upto 48hrs to delay delivery, for steroids to act or in utero transfer.
4. MgSO4 for neuro protection between 24-32wks gestation.
5. Antibiotic therapy has no role in the management of acute PTL.
6. Progesterone supplementation has no role in the treatment of acute PTL.

Labour management

- Delivery is conducted in a teritary care centre with good neonatal facilities.
- Neonatal counselling is preferred before delivery.
- Continuous electronic fetal heart monitoring is preferred in labour.
- Antibiotic prophylaxis to cover GBS infection -IV penicillin/inj Ampicillin 2 gm IV ATD and 1 gm every 6th hrly.
- Epidural analgesia may be useful for pain relief.
- Do not use fetal scalp electrode or Fetal blood sampling in PT babies <34wks gestation.

2nd stage management

- No routine episiotomy or forceps delivery to protect the fragile preterm head.
- Vaccum is better avoided due to the fear of intracranial bleed .
- Preferred mode of delivery is by the vaginal route.
- Consider ceasarean only for obstetric indications. Studies have shown that no increased neonatal survival with CS compared to vaginal delivery.

Timing of cord clamping for preterm babies born vaginally or by ceasarean.

- Wait for atleast 30sec but no longer than 3mts before clamping the cord of preterm babies not requiring immediate resuscitation.
- Early cord clamping is required in asphyxiated babies.

Milking of cord

- It is done for 3 times in 30 sec.
- 10cm long cord should be squeezed and clamped as soon as possible .
- Delayed cord clamping or milking of cord is associated with a decreased need for blood transfusion, less chance of neonatal anemia,lower risk of Necrotising enterocolitis & Interventricular haemorrhage in the newborn.

  (From Dr.Bindu Menon 's talk)

PATH TO HAPPINESS

Is there a path to happiness? Is there a path to living stress-free in this world? And the answer is yes. How to be at peace? If you are at peace, if you are happy, any endeavour you undertake, you simply succeed at it. You will not only succeed, you'll actually enjoy the journey.

One of the greatest mistakes is to think that somehow, something drastic needs to change in your life for you to be happy. Happiness is a habit. People often think something big is going to happen before you can start feeling fulfilled. But the truth is, if you can't find fulfilment in your current life, it's very unlikely, you'll find it later on in any other lifestyle.

The four principles of happiness.

GRATITUDE

The first principle of happiness in life is gratitude. Unless you are grateful for absolutely everything you have in your life, you can't start to be happy. Not just all the good things, but for everything, because maybe there are a lot of things that we can't make sense of, but they have a role to play. Maybe they are there to train us, make us strong, make us better, make us think differently, make us question. So, everything, every incident, every experience, every event is there for a reason. And mostly, we have invited it.

Often what happens is that we have a desire, it's fulfilled, and before we have time to take a breath and thank anybody, we have a new one. And this endless cycle keeps most people busy in their whole life. And because they are constantly wanting something else, they fail to appreciate what is already

there. And as a result, that sense of deep non-fulfilment, that something is lacking, never leaves them. If you were to sit down and write what all you are actually blessed with, what you already have, you will know that you have plenty. You have enough to be grateful for and unless you are grateful you won't feel light. Walking away with the burden of desires and expectations, you will feel heavier and heavier by the day.

You need to just take out few minutes and started writing down: I've got a body, I've got the mind that works, I've got clothes, I've got a roof over my head, I can eat, I don't sleep hungry. Yes, maybe my family wasn't the best, may be my friends weren't the best, and may be my country wasn't the best but it's a matter of perception. Life is how we take it more than what we make of it. So if there is really one thing anybody could inculcate in their life, one thing that will make all the difference to how you feel when you go to sleep and how you feel when you get up, it's how grateful you are to each and every thing you have.

Being grateful or gratitude is simple. It's just a two-minute 'thank you' exercise. Try to say I don't need anything more! I'm just happy the way I'm and I am progressing towards my own elevation and for those around me, that, I don't want anything else. I'm not looking for love, I'm not looking for attention, I'm not looking for money, I'm not looking for anything, let me just be in the present moment.

When you are grateful, you open up. When you open up, you sprout, you blossom you bloom. And then you spread the fragrance.

COMPASSION

The second principle is to be compassionate, which is rightfully called karuna in Sanskrit.

When you do something for others, you are helping nature grow. To expect compassion in return is a mistake. Don't have that expectation. Everybody has an individual karmic account. The person you are showing compassion towards may not regard or even respect it. But that's not a good enough reason to abandon it.

When your circumstances, when people around you shape you or are able to shape you the way they want you to behave, they have won and you have lost. That means they are stronger than you. If you are stronger than them, then you would know how to stand your ground. And compassion is a matter of choice. Compassion is about forgiving a person. But forgiveness doesn't mean that you accept what they do to you or what they have done to you. It's not depreciation. It is, that I am not going to hold anything in my heart against this person.

When you exercise compassion, it's a divine emotion. You are of use to the world, to nature. Nature is then interested in you. It's interested in what you want. It's interested in making sure that you are taken care of. It's easy to just say, move away, but that is an easy way out.

Compassion requires great strength. Anytime you are not able to exercise compassion, the only thing you really have to think about is, 'Am I so weak, that I can't even be compassionate?' Being compassionate towards siblings, parents, friends, society and the world has a calming effect on

the mind. If there is only one virtue you could have, I would say, have compassion! A life without compassion is as good as an animalistic life.

Scientifically speaking, the same part in the brain is activated when we make somebody else happy, as it does when we ourselves are happy. The brain makes absolutely no distinction between whether we are making another person happy or making ourselves happy.

Sometimes compassion is in rejection; sometimes ignoring the other person is compassion because if you accept what they say about you, then you might feel agitated. Sometimes compassion is simply that I have opened both my ears. In through one and out through the other!.

BEING HAPPY

Most people keep tossing and turning in their beds every night, day in, day out. One of the most basic activities is to sleep and the struggle will just nip it, because there is so much going on. The mind is constantly racing in a billion different directions; and that's because you kept yourself so busy thinking about things that are absolutely irrelevant. And the funny thing is, most of the time, you are not thinking about future plans. You are thinking about other people.

Our mind has a natural tendency to gravitate towards negativity. If you sit in solitude, the first set of thoughts that will come to you will be negative thoughts. You'll recall all the bad moments, you'll recall all the painful moments you've been through in your life and that will trigger a whole set of negative emotions in you. You might start to think bad about the other

person, that he or she did something bad to me, I deserved better. That's the funny part. They are not even aware. They don't even know you are thinking about them. But you are causing yourself much greater damage, which is totally unnecessary. Don't keep it in. Don't ponder over it. Because anything you hold in your mind for long enough will manifest in your life, the good and the bad. It's harder to hold on to positive things. And that's why most people struggle to manifest positive things in their lives.

This leads me to the third point. How to be happy. Being happy in itself is the third action in the path to happiness. Happiness is a commitment. It's not dependent on what you have or don't. It's simply: I'm determined to be happy.

SURRENDER

The fourth principle to the path of happiness is surrender. Your life becomes a lot more tense and, kind of unmanageable if you try to control everything yourself.

Leave something to the divine. Leave something to nature. You don't have to remind yourself to breathe. It's there! Imagine if you did that, remind yourself that you have to take control of your breath – you'll perhaps forget to breathe and fall asleep. And you won't wake up! So that is surrender! Surrender is, 'I'm happy however you're keeping me. Allow me to be grateful that I exist, that I'm able to think, able to walk, able to eat, able to pray, able to help somebody! I'm happy with that. I don't need anything more.'

The only way to retain anything, only way to grow anything, is to pass it on. Anything that you are willing to part

with, that thing will grow in your life. You'll get more and more of that. The only way to keep anything good or bad is to give it to others. The more you give it, the more it will grow. And surrender is giving back to the universe! Well, I'm just happy to be here! Things could have been much worse!

How many of our fears actually ever come true? Chances are, less than 1 percent and that too is a very generous figure. I think .001 per cent of our fears ever come true. Whenever you experience fear, you have to ask yourself: what am I afraid of? What's the worst that can happen? And suddenly your mind will shift. Think about God. 'You know you have created me, if you are my creator than I don't have to worry.' It is not practical to always have a summer. Sometimes you have to see a winter, sometimes you have to see the fog, sometimes you have to see the clouds, sometimes you'll get the blue sky, sometimes you'll see rain, and sometimes there will be hailstorms, sometimes maybe windstorms. But these are all the various colours of life. In each of these colours, it's up to you whether you want to go out and have a good time, or sit in and be afraid and keep planning and keep planning and keep planning. It's a matter of personal choice.

Basically, your happiness is in your hands. People will make you feel good for a little while; people can give you pleasures. People can help you feel happy for a short while. But ultimately if you choose not to be happy, nobody can make you happy. If you choose to be happy, nobody can do anything to you otherwise.

Evaluation and Management of Recurrent Pregnancy Loss

Three elements essential for pregnancy to succeed

- Viable embryo.
- Immune tolerance.
- Receptive endometrium and uterus.

Definition

- Recurrent pregnancy loss : A distinct disorder defined by 2 or more failed Clinical Pregnancies.
- Clinical pregnancy to be documented by Ultrasound or Histopathology.
- Excludes Ectopics and Molar pregnancies.
    - *Fertil Steril 2012*

Eshre 2017

Two or more clinical and consecutive pregnancy losses with either ultrasound or histopathological documentation, with exclusion of ectopic and molar pregnancies.

Strange but true facts

- Only 60% can be explained even after detailed investigations.
- The best prognosis exists for the cases which are unexplained with successful outcome in upto 65%.

Incidence

- Overall risk of clinical pregnancy loss 15%.
- 25% if chemical pregnancies are included.
- Rates double after 40.
- 1-5% couples experience RPL.

Classification

- Based on period of gestation
    - Early
    - Late

- Based on chronology
    - Primary – only pregnancy losses with no live child.
    - Secondary – pregnancy losses following one or more live children.
    - Tertiary – live pregnancy and pregnancy losses are interspersed.

When to evaluate..?

Chances of repeat miscarriage

After # 1 low

After # 2 24 - 29%

After # 3 31 - 33%

Hence we can evaluate after two consecutive losses.

Causes of RPL

- Chromosomal abnormalities.
- Maternal anatomic abnormalities.
- Endocrinologic..
- Immunologic.
- Infections.
- Hypercoagulable state.
- Lifestyle causes.
- In 40% no cause identified.

How to evaluate

- Detailed history.
- Clinical examination.
- Lab investigations including karyotype .
- Other investigations.

History

- Detailed history of previous miscarriage
- Family history of Reccurent pregnancy losses.
- Gynecological surgical history – myomectomy, surgical correction of uterine anomalies .

- H/O chronic infections/ diseases.
- H/O substance abuse.
- Environment/occupation – eg. dye industry, chemical industry.

Detailed history of previous miscarriage

- Documents if available will be very useful.
- Lab investigations.
- Nature of pregnancy loss – period of pregnancy, viability , whether associated with pain.
- H/O curettage.
- H/O infection.

Clinical examination

- Look for chronic illness/ infections.
- Detailed gynec examination to identify local causes .

Chromosomal abnormalities

2 or more miscarriages

Obtain karyotype of products of conception

- Aneuploid - No further evaluation; consider preimplantation genetic testing.
- Unbalanced translocation or inversion – Parental karyotyping.
- Euploid karyotype – complete workup for RPL.

Chromosomal abnormalities of conceptus

- Aneuploidy accounts for most first trimester losses.
- Conventionally FISH technique after growth in culture is used to detect.
- Newer techniques like SNP microarray are capable of detecting abnormalities without growth in culture .

Collection & Transportation

- Products of Conception in a Sterile container with EGL transport media. If EGL media is not available, other sterile culture media can be used (RPMI, Hanks Solution).

- 15-30 mg chorionic villi/placental tissue using sterile technique. Place in sterile tube(s) with transport media. Tissues fixed in formalin cannot be used.
- Must be received in securely closed, sterile container with sterile culture media. Refrigerate until time of shipment. Ship sample at room temperature for receipt at EGL within 24 hours of collection.
- If fetal demise occurred more than 48-72 hours prior to retrieval of tissue and delivery to the lab, fetal tissue is unlikely to grow.
    - Emory university genetic lab

Parental karyotyping

- To be done when conceptus shows unbalanced translocation or deletion.
- May also be done if Products of conception not obtained for karyotyping in RPL.

Management options for chromosomal translocation

- Genetic counseling.
- Preimplantation Genetic Testing.
- Gamete donation.

Endocrinologic causes

- Luteal phase defects.
- Untreated hypothyroidism.
- Diabetes mellitus.
- Hyperprolactinemia.
- Diminished ovarian reserve: check AMH.

Luteal Phase Defect

- 12-28 % cases of recurrent pregnancy loss.
- May be caused by
    - Hyperprolactinemia.
    - PCOD.
    - Hypogonadotrophic hypogonadism.

- Diminished ovarian reserve.
- Stress, exercise, weight loss.

- Lack of consensus in diagnostic criteria – progesterone levels, dating of endometrium.
- Empirically may be treated with supplementation of progesterone.

Progesterone

- Rationale for progesterone administration -Progesterone Induced blocking factor - inactivates cell mediated immunity against the conceptus.
- Spectrum of progesterone deficiency may cause early pregnancy loss, midtrimester loss, Intrauterine death or preterm labour.
- Earlier initiation in the luteal phase itself may improve outcome.
- Several preparations available.

Micronized progesterone

Quick Review

- Natural progesterone - NMP (decreasing the particle size increases absorption & bioavailability)
- Sustained release administered orally. Non sustain release capsule can be administered orally, vaginally or rectally.
- Vaginal route better efficacy as it bypasses liver but patients may not prefer as it is messy.
- To fully protect endometrium- 300mg/day in divided doses.
- Maximum absorption after food .
- NMP Capsules Short acting and needs multiple doses.
- Newer Progesterone Sustained Release formulation has longer half-life hence, less dosage frequency.
- Lipid friendly.
- Favours diuresis (so useful in HRT as cardioprotective)

Adjuvant Progesterone in patients with Cervical Cerclage

- The preterm birth rate at <36 weeks in the adjuvant group was significantly lower than in the non-adjuvant group (17% vs 51%, P < 0.05). Adjuvant progesterone therapy was significantly associated with a reduction in SPTB at <36 weeks (adjusted odds ratio, 0.12; 95% confidence interval, 0.02-0.69, P < 0.05) even after adjusting for known covariates, including a visible membrane, gestational age, prior SPTB, and use of amnioreduction.
- Conclusion: Adjuvant progesterone therapy with physical-exam-indicated cervical cerclage was associated with reductions in SPTB, low birthweight, and neonatal intensive care unit admission.

J Obstet Gynaecol Res. 2016 Dec;42(12):1666-1672

Anatomic causes

- Uterine anomalies.
- Intrauterine adhesions.
- Intrauterine masses.
- Cervical incompetence.

Anatomic evaluation

- Especially in late first trimester or midtrimester losses.
- Includes Ultrasonography, hysterography and hysteroscopy.
- 3D transvaginal ultrasound useful.
- MRI may be an option .

Uterine anomalies

- Septate uterus.
- Unicornuate/bicornuate uterus.
- Uterus Didelphys.
- Intrauterine adhesions.
- Submucous fibroid.

Management

- Surgical correction.

- ✸ Hysteroscopy .

Management of cervical incompetence

- ✸ Cerclage.

Antiphospholipid antibody syndrome

- ✸ Contributes to 7-25% of early RPL.
- ✸ Antibodies involved
  - Anticardiolipin antibodies.
  - Lupus anticoagulant.
  - Beta2 glycoprotein antibodies.

  APS : Sydney Criteria
- ✸ Clinical criteria
  - › Vascular thrombosis.
  - › Obstetric morbidity.
- ✸ Laboratory criteria
  - › aCL IgG/IgM medium titres .
  - › Anti-Beta2GP1 antibody IgG or IgM .
  - › Lupus Anticoagulant.

- Werner et al COG 2010

Thrombotic disorders

- ✸ Inherited .
- ✸ Aquired .
- ✸ Tests :
  - › APS panel +.
  - › Factor v Leiden.
  - › Protein C, Protein S deficiency.
  - › MTHFR (methylene tetrahydrofolate reductase) polymorphism.

Management

- ✸ Aspirin.
- ✸ LMWH.
- ✸ Oral Warfarin in postpartum period.

Infectious causes

Ascending infections can cause miscarriages.

Vaginal swab for Infections

- Ureaplasma urealyticum .
- Mycoplasma hominis .
- Chlamydia .
- BV in MTL (Gardnerella vaginalis, Mycoplasna hominis, Mobiluncus) .

To do TORCH or not

- TORCH testing was given a decent burial a long time ago.
- Time to exhume it? -Based on the findings of the study, it is concluded that a previous history of pregnancy wastage and the serological reactions for TORCH infections during current pregnancy must be considered while managing BOH cases to reduce the adverse foetal outcome.

J Health Popul Nutr. 2011 Feb; 29(1): 77–80.

Treatment

- Spiramycin (Rovamycin) 12-15 million units/day.

Lifestyle factors

- Occupational exposure.
- Obesity.
- Tobacco, alcohol, recreational drugs .
- Age -According to a large prospective register linkage study, age-related risk of miscarriage in recognized pregnancies has been seen to be: 13% in 12-19 years, 11% in 20-24 years, 12% in 25-29 years, 15% in 30-34 years, 25% in 35-39 years, 51% in 40-44 years, 93% in e" 45 years.
- Advanced paternal age is a risk factor.

– Rohilla, M, Muthyala T. Recurrent Pregnancy Loss (RPL) - Causes and Management. J Gynecol Neonatal Biol. 2017;3:58.

Empirical treatment

- Progesterone supplementation- In PROMISE TRIAL (Progesterone in Recurrent Miscarriage) 2016, first trimester progesterone therapy did not have clinically significant benefits in pregnant women with history of unexplained recurrent miscarriages
- HCG administration, Bed rest, Anticoagulants – does not improve results.
- Tender loving care

Conclusion

- If properly worked up majority of cases of RPL will yield a cause .
- We may be able to offer a solution to most couples with RPL . (From Dr Hema warrier's talk)

Dr Sathyalakshmi

Audience

Dr Hema Warrier

Dr Davashree