



NEWS LETTER

Dr Uma Ram
Chairperson

Dr Arjunan Tamilselvi
Fellow representative

Dr Deepa Thiagarajamoorthy
Fellow representative & Treasurer

Dr Meera V V Raghavan
Fellow representative

Dr Pratima Radhakrishnan
Fellow representative

Dr Shameema KV
Co-opted Fellow Representative

Dr Ajit S
Co-opted Fellow Representative

Dr Anbu Subbian
Member Representative

Dr Chinmayee Ratha
Member Representative & Secretary

Dr Lalitha N
Member Representative

Dr Varalakshmi N
Co-opted Member Representative

Dear Friends & Colleagues,

We are stepping into the last few months of 2022 and despite the continued presence of COVID, we are back to our travels and in person conferences. We have just celebrated Navaratri and are in the festive mood looking forward to Deepavali soon.

I am very thankful for the members and fellows who have committed time for continuing Zonal activities. We have run our perineal trauma workshop with hands on training and the perinatal mental health module has been upgraded. We look forward to running these much needed program and encourage our members and fellows to use this opportunity. Two young MRCOG's have completed the travelling fellowship this year and we will soon send out the applications for 2023.

At the end of this month, we have Dr Abdul Sultan's Visit as a Sims Black fellow. He will be training post graduates in two hands on skill sessions. In the coming weekend, we have the SZ annual conference at Kochi on the 15/16 October and I hope to see many of you there.


The college is working hard to meet the exam needs of candidates and we are having the Part 3 exams in Chennai and Kolkatta this November. The work of training both clinical and Lay examiners is continuing, to ensure we have the necessary manpower.

As you are all aware, the new team of officers, under Dr Raneer Thakkar as President, take charge in December. I take the opportunity to thank the current team of officers for a wonderful tenure and wish the incoming team the very best for the next 3 years.

I sign off with a sense of satisfaction, on this note for the 13th newsletter of IRC India South.

Wishing you and your loved ones in advance for a safe and joyous Deepavali

With regards


Uma

Induction of Labour

Dr Srimathy Raman, Dr Padmalatha Venkataram

Introduction

Induction of Labour (IOL) is an artificial process of cervical ripening and initiation of contractions before the onset of spontaneous labour and involves the use of pharmacological and/or non-pharmacological methods. IOL rates are progressively increasing worldwide with approximately 1 in 3 women undergoing IOL because of rising rates of high-risk pregnancies and changing social demands. We plan to review the When, How and to Whom IOL in this article.

How can we predict the success of IOL?

Cervical effacement plays a very important role in determining the success of IOL. Many prediction models have been developed with various combinations of factors like maternal characteristics, Bishop score, biochemical and ultrasound markers. The modified Bishop score appears to be the most reliable in predicting the success of Induction of labour.

In 1964, Edward Bishop set forth criteria for elective induction of labor which included a scoring system to help predict successful induction of labour. Score is calculated using four cervical characteristics - cervical dilatation in cm, cervical effacement, cervical position, cervical consistency and fetal position. In the modified Bishop score, effacement has been replaced with cervical length.

Modified Bishop Score				
Score	0	1	2	3
Cervical dilatation (cm)	Closed	1-2	3-4	>5
Cervical length (cm)	>4	3-4	1-2	0
Cervical consistency	Firm	Medium	Soft	
Cervical position	Posterior	Midline	Anterior	
Vertex station	-3	-2	-1,0	+1,+2

Using this scoring system, a pre induction Bishop score of > 6 is predictive of a successful vaginal delivery, whereas a score of < 3 is highly predictive of a failed induction in both nulliparous and parous women. It is important to document the Bishop score and plan appropriate cervical ripening agents in those with unfavourable cervix.

When to plan Induction of labour?

Induction of labour, with the aim of achieving a vaginal birth, must be undertaken only when the benefits of delivery outweigh the risks of continuation of pregnancy. Nearly 1 in 4 labour inductions can result in emergency caesareans and can be associated with increased maternal and neonatal morbidities, which compromise the birth experience. Neonatal adverse outcomes are lower with IOL at 39-40 weeks and hence IOL should be deferred until after 39 weeks- whenever feasible. The long-term follow-up of children delivered after labour induction is lacking.

IOL is recommended in low- risk pregnancies at or after 41 weeks. Systematic review of 16 RCTs on 8796 pregnancies, showed that IOL between 38 + 4 and 40 weeks for non-medical indications does not increase caesarean births or impact perinatal outcomes and reduced the incidence of maternal hypertensive disorders. However, it can have a major effect on caesarean rates if strict protocols for IOL and labour management are not adhered to. Membrane sweeping is recommended as an adjunct or to avoid formal induction and can be performed a week or 10 days prior to induction. It can reduce the need for IOL (aRR, 0.73) and increase the possibility of spontaneous labour (aRR- 1.21).

ACOG in 2021 has provided clear guidance on the timing of IOL for different indications with the caveat that most recommendations were based on observational data and expert opinion. This is a very good reference point for all clinicians though there are some differences compared to NICE.

Table 1 -Suggested Timing for IOL -Modified from ACOG/NICE/RCOG/ISUOG

Indications	Suggested Timing for Induction of labour
Post-term Pregnancy	40-40+5 weeks
Diet-Controlled GDM and no complications	39-40 weeks
Medically managed GDM	38-39 weeks
Pregestational Diabetes -Good blood sugar control, and no microvascular progression	38-39 weeks
Unstable glucose and/or microvascular complications	Consider IOL at 36 weeks or when maternal or foetal risks outweigh the benefits of continuing pregnancy
Gestational Hypertension	After 37 weeks (could be individualised)

Chronic Hypertension without Preeclampsia	37-39 weeks
Preeclampsia without severe features	37 weeks
Intrahepatic Cholestasis of Pregnancy	
Serum bile acids <40 mmol/L	39 weeks
Serum bile acids 40-99 mmol/L	36 to 37 + 6
Serum bile acids >100 mmol/L	Consider IOL at 36 weeks
Nulliparous person in the absence of a medical indication	Discuss evidence for IOL at 39 weeks
Maternal age > 35 years	Consider IOL at 39 weeks
Use of assisted reproductive techniques	Consider IOL at 39 weeks
Body mass index > 40 kg/m ² and no other complications	Consider IOL at 39 weeks
Prior caesarean birth	Consider IOL between 39 -40 weeks
Suspected Macrosomia	Consider IOL at 39 weeks
Preterm prelabour rupture of membranes (and no evidence of chorioamnionitis)	34-36+6 weeks
Dichorionic-diamniotic twins	37 –38 weeks of gestation
Monochorionic-diamniotic twins	36 -37 weeks of gestation
Oligohydramnios (isolated -deepest vertical pocket less than 2 cm)	Consider IOL between 38 –39 weeks of gestation
Polyhydramnios (mild, idiopathic)	39 –40 weeks of gestation
EFW <3 rd centile	36- 38 weeks
Umbilical artery increased PI	36-38 weeks
EFW 3 rd centile-10 th centile	38-39 weeks

IOL is not without its risks to mother and fetus. Mothers might experience uterine hyperstimulation, longer labour and its attendant complications. Hence, an evidence-based approach towards selection of candidates and appropriate individualised use of induction agents are vital to ensure optimal outcomes. Adequate patient counselling with information leaflets and an informed written consent is important prior to IOL. Induction should be avoided if there are any contraindications to labor or vaginal delivery.

Where to plan Induction of labour?

It is important to have local protocols on how, when, and where to perform IOL. Monitoring of the maternal and foetal wellbeing should be individualised for different clinical circumstances. IOL as an outpatient, can be performed for low- risk pregnancies, to reduce the duration of hospitalization and possible costs of medical care, where there is an easy access to hospital. In India, there are several logistic issues in recommending an out-patient based IOL and almost all IOL happen in the hospital setting.

What agents to be used for IOL?

In unfavourable cervix, in order to increase the success of a vaginal delivery, cervical ripening agents are recommended. These can be mechanical or pharmacological. Foley's Catheter that apply pressure at the level of the internal os and stretch lower uterine segment, act by release of local prostaglandins. A 18 F Foley inflated with 30-50 ml water, with balloon resting at the level of the internal os, is the commonest mechanical agent employed. It is simple to use, easily reversible, cost effective and reduced risk of uterine hyperstimulation. Intra cervical Foley are safe even in women with VBAC. Mechanical agents are contraindicated in low lying placenta, APH and rupture of membranes. Cochrane review showed mechanical method was associated with less risk of uterine hyperstimulation, and fetal heart changes compared to prostaglandins(PG) and Misoprostol.

Pharmacological agent for cervical ripening includes Prostaglandin E2, used either as an intracervical or intravaginal preparation and Misoprostol. Vaginal prostaglandins are not contraindicated in the presence of the term prelabour rupture of membranes. Controlled release 10 mg Dinoprostone, used as a vaginal insert, has been designed for easy removal in the event of uterine tachysystole. While using intracervical PGE2 preparation, it is important to ensure that the dosage is 0.5 mg and vaginal preparations of 1 mg or 2 mg should not be used intra-cervical. While using PGE2 gel, it is important to ensure 6 hours have elapsed before starting oxytocin infusion. With the use of insert, oxytocin can be started after 30 minutes of removal of dinoprostone insert. Use of PGE2 in women with unfavourable cervix has been shown to reduce caesarean section rates (CS).

Table 2 - Induction Agents-Regimes and side effects

Method	Administration	Dose	Advantages	Disadvantages
Prostaglandin E1- Misoprostol	Oral/vaginal tablets	25 mcg oral -2 hourly for 5 doses 25-50 mcg vaginally every 4-6 hours	No need for refrigeration Low Cost Oral Misoprostol- highest rate of vaginal delivery	PG side effects - nausea, vomiting, diarrhea, fever, and chills; Vaginal discomfort Hyperstimulation-FHR changes (highest with Vaginal Misoprostol)
Prostaglandin E2- Dinoprostone	Gels, and Pessaries	0.5 mg in a 2.5-mL syringe for endocervical application-repeated 6 hourly-max 3 doses. 10 mg pessary -24 hours	Ease of removal with pessary	As above Need for refrigeration Cost
Mechanical methods	Single balloon Foley catheters (typically #16 or #18) Hygroscopic dilators	30 ml or 60 ml 12 -24 hours No major difference between 30 or 60 ml	No hyperstimulation Can be used as an OP agent Lower cost Reduction of side-effects from medical treatments No increased risk of infectious morbidity	Difficulty in inserting through an unfavourable cervix Discomfort for the woman Risk of accidental rupture of membranes

Misoprostol, is a synthetic PGE1 found to be effective as a cervical ripening and induction agent. The major benefit of Misoprostol is, it is stable at room temperature making it an attractive option in all settings. Misoprostol has rapid onset of action, can be used both orally and as vaginal preparation. Orally 50 mcg preparation is used and vaginal dosing is 25 mg, given every 4 hours. Oxytocin can be used only 4 hours after the last dose of misoprostol.

Misoprostol is more effective than PGE2 in achieving vaginal delivery, but associated with more tachysystole. Vaginal misoprostol was found to be most effective in achieving vaginal delivery within 24 hours, but it also had the highest uterine hyperstimulation rates. Cochrane in 2021 found that using low-dose oral misoprostol led to fewer caesarean sections. ACOG and RCOG acknowledge that misoprostol is as safe and effective as dinoprostone.

Oxytocin intravenous infusion is the oldest used induction agent, which acts on uterine receptors and induces uterine contractions. Oxytocin has no direct action on cervix. With PROM, oxytocin stimulation is more effective than expectant management to reduce maternal infection and increase vaginal deliveries within 24 hours, but it may increase CS rate. In women with favourable cervix, amniotomy followed by early oxytocin administration is recommended. In IOL, concurrent use of pharmacological and mechanical agents-Foley catheter with PGs can help to reduce the latent period of labour and shorten the induction to delivery interval.

Failed IOL

The definition of failed IOL is variable. It ranges from the inability to initiate labour and/or achieve a specified threshold of change in Bishop following the administration of one or more cycles of the induction agent(s). If induction is unsuccessful, it is important to plan subsequent management and options include deferring IOL, offering a rest period if clinically appropriate, continue induction process or caesarean birth. There are no major evidence-based recommendations for choosing a second induction agent after failure of first IOL attempt. Ideally, the second agent should be a different method (if initially was mechanical, try pharmacological) or alternatively a different option in the same category- different prostaglandin or another route of prostaglandin administration.

Induction in special circumstances

IOL should be done with caution in women with previous caesarean section, unstable lie, polyhydramnios, grand multiparity, twin pregnancy. In women with previous LSCS, mechanical methods are preferred to prostaglandins due to a higher rate of uterine rupture with pharmacological methods. In obese women, success of IOL agents seem to be less and there are no specific recommendations regarding the ideal induction agent in this population. In women with Intrauterine foetal demise, vaginal delivery should be attempted with use of different agents and Caesarean is generally reserved only if vaginal delivery is absolutely contraindicated. Mifepristone can be used alone or in combination with prostaglandins (when it can be safely given). The dose of misoprostol is dependent on the gestational age. Mechanical methods can be used if there are contraindications to prostaglandins.

Conclusion

IOL is always attempted with the aim of achieving of a vaginal delivery. Evidence-based approach, shared decision making, appropriate patient selection and using the right agent in the right dose will optimise IOL rates and its outcomes. The availability and affordability of inducing agents and facility for appropriate monitoring should be considered before induction. Implementation of a safety toolkit-checklists, documentation sheets and clinical protocols are essential to prevent complications. Regular auditing of IOL rates, indications and outcomes helps to monitor and modify practices to ensure optimal care provision.

References

1. Evaluating misoprostol and mechanical methods for induction of labour. Scientific Impact Paper No. 68 April 2022
2. NICE guideline 2022. Inducing labour (NG207)
3. Optimal timing of labour induction in contemporary clinical practice. Best Practice & Research Clinical Obstetrics and Gynaecology 79 (2022)
4. Induction of labour in low-risk pregnancies before 40 weeks of gestation: A systematic review and meta-analysis of randomized trials. Best Practice & Research Clinical Obstetrics and Gynaecology 79 (2022)
5. ACOG Committee opinion Number 831- Medically Indicated Late-Preterm and Early-Term Deliveries (2021)
6. Low-dose oral misoprostol for induction of labour. Cochrane Database of Systematic Reviews 2021
7. A systematic review and network meta-analysis comparing the use of Foley catheters, misoprostol, and dinoprostone for cervical ripening in the induction of labour. BJOG 2016;123 :346–354



Dr Padmalatha Venkataram, FRCOG, MRCP(I)
HOD, Department of OBG
Rangadore Memorial Hospital,
Bangalore



Dr Srimathy Raman, MD, FRCOG
Consultant OBG
Rangadore Memorial Hospital,
Bangalore

Queen Elizabeth II and her India connection



Welcomed by the First Prime Minister and First President of India in 1961 (Image courtesy -zee news)



In 1983 with Indian Prime Minister (Image courtesy - India today)



At the Rashtrapathi Bhavan, on the occasion of 50th year of Indian Independence (Image courtesy - ndtv)



- Queen Elizabeth II was the First monarch to accede throne after Indian Independence in 1952
- She visited India thrice during her life time – 1961, 1983, 1997
- In 1961 – Queen Elizabeth along with her husband, Prince Philip were the Guests of Honour, at the Republic Day parade
- In 1983, her visit was for the Commonwealth Heads of Government Meeting (CHOGM) and she presented Mother Teresa with an honorary Order of the Merit, during this visit.
- In 1997 – she visited India to mark the 50th anniversary celebrations of India's Independence .

Medical Trivia

- Blood vessels in the human body are between 60,000-100,000 miles. If they were taken out and laid end-to-end, they would be long enough to travel around the world more than three times
- First laparoscopic operation of humans was reported by Hans Christian Jacobaeus in 1910
- The first (recorded) obstetrics textbook was published in 1513, titled, to Der Rosengarten, and was written by Eucharius Rosslin, a German apothecary.
- Obstetrix was the Latin word for midwife, derived from obstare (to "stand before") - to receive the baby.
- Elizabeth Blackwell (1821 – 1910) was the first woman on the Medical Register of the General Medical Council.

Dr A Tamilselvi

The Navaratri is a nine day autumn festival, celebrating women empowerment in the Hindu tradition. Navaratri festival celebrates the defeat of a demon by Goddess Durga signifying the victory of good over evil. While In Kolkatta and Eastern part of India, these nine days mark the Durga Pooja celebrations, in the Southern states it is marked by Navaratri Golu or the Bommai Golu. In Tamil, Kolu means 'Divine Presence', in Telugu, Bommala Koluvu means 'Court of Toys', and in Kannada, Bombe Habba means 'Doll Festival.'

In Tamil Nadu, Karnataka, and Andhra Pradesh, the festival includes placing dolls and figurines of a multitude of God, Goddesses, animals, men, and children on a step-like set-up. The number of steps used are usually odd in number and steps representing progression.

Most of the dolls placed in kolu, have been passed on from many generations and are brought out only during the Navratri season. It is always a custom to add at least one new doll every year which represents progress and growth. Traditionally these dolls are eco-friendly – made out of clay or wood, in the recent days dolls with different materials like terracotta, papier mâché and fabric are designed to suit the themes that are presented.



The arrangement usually follows a pattern, with the bottom-most tier of the step usually displaying the figurines of human beings. Scenes depicting human activities in the settings of village or city life, such as a merchant selling wares, a wedding scene or farming occupy the last step. At the last step a bed of sprouting seeds with a mini grassland is a feature, signifying Mother Nature. The topmost of the steps are preserved for the celestial Gods and Goddesses, while the dolls of saints and sages in the Hindu religion occupy the middle steps. This hierarchic arrangement of the celestial and terrestrial life is a representation of the world order as defined by the popular Hindu belief system.

It is important to remember that the hierarchy is not compulsory and some people just arrange dolls as per their convenience. Kolu form and manifestation are changing in response to the changing times. Apart from the divine and mythical figures, some Golu also depict particular themes like environment, space, current affairs, and more. We no longer find only idols of Gods and Goddesses, there are representations of Rock stars, Band sets, cricket match scenes, laughing Buddha and dolls procured during travel from different parts of the world have also made it to the Kolu steps now. The sky is the limit to showcase one's creativity during the Navaratri kolu.

The household displaying the Kolu, invites women and children in the evenings and have recitals and pooja. The entire process of arranging the dolls, inviting guests home, interacting with them, singing and enjoying the festival is a socially engaging event filled with creativity. A similar doll display tradition exists in Japan, called Hinamatsuri. The one in South India however, is interlaced with the Hindu tradition mainly.



Upcoming Events:

Royal College of Obstetricians & Gynaecologists

3rd Annual Conference of RCOG IRC

WOMEN'S HEALTH
A LIFE LONG JOURNEY

Organized by: RCOG Kerala Chapter
15, 16 October 2022
Grand Hyatt, Kochi

ONLINE REGISTRATION NOW OPEN

INTERNATIONAL FACULTY

Prof. Denise Leakey Regan

NATIONAL FACULTY

Dr. Bhaskar Pal

Dr. M. M. Samuzzooha

Prof. V. P. Pally

Dr. Surekh S.

Dr. Jalithree Gajraj

Dr. Tanjasekari S.

Dr. Kameewari S.

Dr. Sumana Manchar

Dr. Sheila Bekirithran

CONFERENCE HIGHLIGHTS

- Cutting-edge scientific programme
- Stump the experts
- Listen to world renowned speakers
- Exciting panel discussions

REGISTRATION

From Aug 1st: 6000 Rs. spot registration 7000Rs
Post graduates: 3000 Rs without Banquet 4000 Rs with banquet

Registration: <https://aicccogsz.com/>

Advancing for Women's Wellbeing

AICC RCOG 4-6 NOV 2022 Mumbai

35TH ANNUAL CONFERENCE OF AICC-RCOG

All India Coordinating Committee of Royal College Of Obstetricians & Gynaecologists, UK

In Association with

Federation of Obstetric & Gynaecological Societies of India (FOGSI) & The Mumbai Obstetric & Gynaecological Society (MOGS)

Pre Congress-Workshop on 4th November, 2022
Venue: College of Physicians & Surgeons, Parel, Mumbai.

Congress on 05th & 06th November, 2022
Venue: Taj Lands End, Bandra West, Mumbai.

REGISTER NOW
CLICK HERE TO REGISTER

Registration & Payment Link: <https://rps.id/welldg19>

4 NMC Credit Points Will be Awarded

18 RCOG Credit Points Will be Awarded

Registration: <https://www.aicccogwz.com/>