

AVIVA ROMM MD
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Hosted by:
Association of Perinatal Naturopathic Doctors (APND)
& Ontario Herbalists Association (OHA)

INTRODUCTION

Horse chestnut – venous stasis, varicosities; also vitamin c, bioflavonoids, rutin

Poke oil with geranium as topical massage oil for women with lymphadenopathy

Mg sulfate is primary drug for preeclampsia, prevents preeclamptic seizures, controlling blood pressure. There were no clinical trials until recently. Things in obgyn are poorly evidence-based or much of the evidence is AGAINST common practices and policies. Labor induction rate has inc 135% in US in the past 10 yrs. C-section rate in average US hospital is 32%. Women who give birth vaginally are almost “endangered species”!

Fetal heart monitor - ACG journal: zero evidence that fetal heart monitors prevent death.

Freedman curve – how far a woman should be dilating, certain rates vs. ‘falling off curve” means woman will be given labor augmentation or intrauterine catheter b/w baby’s head and uterus, wire taped to mom’s leg connects to machine. Senses UT (uterine) contraction in Montevideo units. If in ten mins she doesn’t get a certain # of Montevideo units will get more augmentation or c-section.

Risk of harm of using botanicals compared to the medical interventions, which typically do more harm than good.

Care from midwife – fewer interventions, better client satisfaction, fewer c-sections.

Big gulf between what a midwife or herbalist can do to counter this medical intervention system due to legal climate.

INFAMOUS OB/GYN QUOTES

“Nature is the worst obstetrician.”

“The only cesarean you get sued for is the one you didn’t do.”

Aviva Romm textbook – counts as “evidence” – textbooks go to court. Book is in the Yale medical library.

What we do is defensible and important.

8 of 15 of the most commonly performed surgical procedures in the US are obstetric.

Hysterectomy rates very high. C-section rates are unconscionable.

Deadly Delivery – paper by Amnesty International

<http://www.amnesty.org/en/library/info/AMR51/019/2010/en>

Re: maternal death rate has gone up 3 x in past 15 years. International human rights issue!

Spend more money on obstetrics than any other country but rank 30th in maternal and 20th in infant mortality.

EBM (evidence-based medicine) includes the following:

- 1- best available studies – includes professional consensus if that is the best available of existing evidence.
- 2 - professional guidelines.
- 3- patient preference. What does the person really want?

20-60% of women have used botanicals during pregnancy. (survey in white, educated) – most don't tell their doc.

SAFETY OF BOTANICAL MEDICINE IN PREGNANCY

Not much that can harm a pregnant mom and baby amount out common herbs used for common conditions.

e. g. One case in Canada – woman was taking *Eleutherococcus senticosus* as a tonic, but product had been adulterated and was taking pericoca. Baby was androgenized – excess hair, excess genital hypertrophy. Extremely rare case.

e.g. Coltsfoot case in Europe – took for chronic cough. Baby born with veno-occlusive disease, fatal due to pyrrolizidine alkaloids – comfrey, borage, coltsfoot.

If someone taking something every day during pregnancy we would know if it affected the newborn as there is a relatively short 9-10 months to cause effect.

Immediate effects of botanicals are typically seen.

Modern interface of use with conventional medicine. not a question of whether the botanicals are safe. It's whether they are forgoing more appropriate medical treatment.

e.g. Comfrey – help with broken bones, UTI - taken orally

But traditionally a pot herb used for topical salves. Not using in traditional way, traditional type of extract, can be more of the safety issue.

e.g. Motherwort = strong emmenagogue. It will inc UT activity, potentially contraction have a larger more stretched UT. Fabulous for HTN and palpitations. If hypertensive very late in pregnancy (past term) and has HTN would be appropriate to choose motherwort.

HYPERTENSION IN PREGNANCY

HTN consequences – placenta is attached to UT wall. Villi from underside into UT endometrium act like anchors, sits in lacuna of mother's blood. Bidirectional pressure systems b/c waste from umbilical cord into maternal circulation for her to eliminate and nutrients and oxygen received by baby.

PIH e.g. 180/100 as if forcing blood through under lot of pressure. Prolonged HTN → dec nourishment to baby b/c pressure too high to go into placental circ → small baby, can force placenta off UT wall → risk of death to mom and baby.

Medical interventions for PIH aren't great – antihypertensives....but these are far better than leaving PIH untreated.

Headaches? Possible preeclampsia – don't treat botanically.

At onset of HTN, can start to use botanicals, cal=mag, vit c, iron, exercise, stress level – bigger picture of HTN. Pregnancy itself can help it arise, once it appears in preg it's harder to control. Black cohosh, hawthorn, crampbark. Motherwort only from about 38 wks when not preeclamptic. Check urine and blood – platelets, LV function, urine sodium, creatinine, protein are typically screened re: preeclampsia.

OTHER HERBS & PREGNANCY

Do NOT use diuretics in pregnancy e.g. dandelion. Women already peeing enough. Keep effective circulating volume in HTN pregnant women as KD and LV take a big hit – maintain perfusion.

Never diurese a pregnant woman.

Nettles is more tonic and nutritive than diuretic. Can measure dandelion diuresis linearly.

Basil, cinnamon, basic common normal culinary herbs totally OK.

Herbs on contraindicated lists don't differentiate between how used, topical use, e.g. calendula, comfrey or aloe are fine topically. Use comfrey on perineum after birth, find during pregnancy topically.

Chamomile is not contraindicated during pregnancy. One study 1979 someone used a conc extract representing pounds of chamomile, no teratogenic effects, but their could be theoretical – ridiculous to CI chamomile.

Botanical Safety Handbook first edition – CI Ashwagandha. This was wrong and based on author heard one person say that it may cause UT contractions. CI will be removed from new edition. Perpetuation of myths due to authors citing other authors. Of things we thought were true 25 years ago, skew the CI list.

RELIABLE CONTRAINDICATED LISTS

Botanical Safety Handbook – American Herbal Products Assoc - new edition this year

Aviva's book or web site

Herbalist you trust

Sometimes Ci list herbs may be used safely in other ways. Dong qui (*Angelica sinensis*) CI in pregnancy b/c can cause bleeding. In TCM used for quieting the fetus. Don't use out of context. In women with hx miscarriage, OK to use Dong Qui and Peony Formula according to formula and dose of traditional text.

Ashwagandha used in Ayurveda to promote fertility and stay on during pregnancy as a nourishing herb to prevent miscarriage and during breastfeeding.

Ruminants that eat lupines during gestation birth calves with bone deformity “crooked calf syndrome”.

Takes a lot of abortifacient botanicals to induce abortion to extent would even be toxic to mother. But in general herbs that can trigger abortion are avoided.

Sage can bring on miscarriage! (case: sage tea to dry up milk while breastfeeding and pregnant at same time → hemorrhagic miscarriage within hours of drinking couple cups of homemade sage tea)

WINDOW period – 1st 10 days – sperm up uterus through implantation – if taking anything during 1st 2 weeks it's not concerning because implant not completed, not deriving anything (exception: risk of radiation)

Blue cohosh is known teratogen, if she has been taking lots to try to induce abortion and it doesn't work, clinical abortion is recommended.

Avoid use of herbs in first trimester – women do not usually develop Gest DM, HTN, etc. during 1st trimester so very little to treat.

UTI or STI or vag yeast infection can occasionally develop in 1st trimester – decide if pharm or botanical. Treat topically if possible. FLAGIL IS KNOWN TERATOGENIC.

Babies exposed during antibiotics during labor by mom's tx of GBS or UTI or any kind of infection during pregnancy – more likely to develop wheezing and asthma. New studies in past few years.

Pregnancy UTI is only time you tx asymptomatic bacteriuria. If more than 1 UTI during pregnancy she is put on nitrofurantoin for entire pregnancy.

Aviva doesn't treat asymptomatic bacteriuria. Has tx hundreds of UTIs during pregnancy and never had it cause abortion.

Uva ursi is NOT CI during pregnancy! Midwives have used it for 2 decades including 1st trimester. Use for limited duration. Aviva got this removed from CI list in upcoming version of Botanical Safety Handbook.

Blue cohosh – Aviva did entire thesis on this. Found only one case where family drank goat's milk of goats eating lupins. Family cat (drank goat's milk) and goats babies with deformity and human mother miscarried.

Rue – oily/aromatic

Tansy –oily/aromatic

These are true abortifacients and are also teratogenic.

Our cells pick up things that are oily. Essential oils and oils cross placenta easily.

e.g. peppermint, lavender, chamomile may have an effect on developing NS, all theoretical. So if no great reason to give heavy medical doses, avoid it.

1st trimester is a formative stage.

2nd is developmental but not formative – can be more comfortable giving herbs.

Essential oils are estrogenic. 3 case reports of boys who developed gynecomastia all using topical lavender products. NB some boys develop this naturally during child hood/adolescence but media called it dangerous, feminizing to boys. However essential oils tend to be estrogenic and aromatherapy should be used sparingly if at all.

UT stimulants also to be avoided in 1st trimester.

Most UT tonics like false unicorn root, Mitchella patridge berry, blue cohosh, spikenard, red rasp probably won't cause UT contractions.

Spontaneous miscarriage rate is huge - >30%. 1 in 10 miscarry without knowing pregnant. But herb would be blamed!

Usually miscarriage due to progesterone issues (use vitex) or had contractions not because of poor UT tone.

Avoid alkaloid-rich herbs in 1st trimester. Alkaloids are strong, they cross placenta.

Antimicrobials, heavy nerviness, berberine.

comfrey; different type of PA in coltsfoot, borage but still don't use these.

Estrogen is never low during pregnancy, therefore don't use phytoestrogens: Sarsaparilla, soy supplements, etc.

OCP - can get pregnant and don't need to abort. OCP doesn't cause problems to baby.

LAXATIVES - Senna is NOT CI in pregnancy. Kerry Bone reviewed this. OBs use senna all the time. However bulking are preferred - flax, psyllium,

Senna can be habit forming,

Anthroquinones are CI - cascara, buckthorn - stim peristalsis and anthroquinones can harm fetus.

Exception - yellow dock contains small amt anthroquinones. Used by midwives - equal parts 14 g (1/2 oz) yellow dock and 14 g dandelion root 1 oz each decoct (simmer uncovered) down to 1/2 cup - cool and add 1/2 cup molasses. Add 1 tsp brandy to preserve a larger batch. Keep in fridge over few weeks. Take 2 tsbp in morning with vitamin C, not on empty stomach for comfort.

Constipation and anemia tend to go hand in hand. Conventional iron supps

Appear not cathartic.

Pregnancy tea - nettles very ut tonifying; nourishing; technically not an adaptogen but so nourishing that adrenally depleted, get stimulant (coffee, candy, chocolate) cravings at 3PM - use nettles tea at this time of day, trace minerals boost to the cells. Raspberry can be used all throughout pregnancy, extremely astringent if steeped longer than 10 minutes, can therefore be nauseating. To get the benefit as nourishment - tea or eat nettles as greens. Red clover, alfalfa, rose hips, flavor with fraction part as spearmint. High proportion of nettles.

1st trimester nausea and not getting nourishment, add something salty like bouillon cube or miso to help decrease nauseating factor. Like adding salt to spinach water - nettles is more like a "green".

DERMATOLOGIC

Pregnancy usually improves a woman's skin.

Pruritis b/c skin stretching on belly, thighs, breasts. Use topical shea butter, cocoa butter as oils.

Massage to ease the stretching physiologically.

PUPPP - horrible itching-like usually occurs in 3rd trimester, can occur 2nd to postpartum. Pruritic urticarial papules and plaques of pregnancy. Typical tx is steroids as much as 40 mg prednisone qd for entire last trimester!

Instead - licorice often CI pregnancy b/c long term use shown to cause low birth weight. Even licorice candy in Netherlands where eaten as candy on reg basis. However no prematurity related to it and risks and benefits of licorice in pregnancy outweigh risks and benefits of corticosteroids. Where is your patient on the continuum?

Scutellaria baicalensis – Chinese skullcap (mint family) – incredibly anti-inflammatory. Use internally for poison ivy rash, or significantly pruritic conditions like eczema. Is cooling and drying.

Licorice is moistening.

For PUPPP – *Scutellaria baicalensis*, *Scrophularia nodosa* (figwort) – use as tea or tincture.

Tincture of equal parts, 3ml od increase if needed up to 5 ml tid. Or 1-2 ml every couple hrs right when itching starting to creep back up.

ALSO CAN USE FOR POISON IVY. Also for pediatric eczema for acute. Not so much licorice for chronic use in kids...other 2 herbs fine.

Lot more bang for your buck with licorice as anti-inflammatory as a decoction.

PUPPP can worsen after childbirth. *S. baicalensis* is predominantly anti-inflammatory. *Lateriflora* is more of a nervine, can use it as a nervine tonic during pregnancy.

Angiotensin-Renin-Aldosterone system – licorice can affect this system but AR has never seen this happen in pregnancy. Prob affects ppl predisposed to HTN – anyone with HTN or had PIH or preeclampsia in past pregnancy – avoid licorice. Shouldn't cause PIH. If suspected it just take licorice out and it would resolve, whereas PIH wouldn't resolve with withdrawal of licorice.

Hard for people to increase low BP after childbirth after having been on steroids.

EFA's very important for skin, PUPPPs.

Kids in US shown to get insufficient EFA's while in utero.

No risk of using licorice for sore throat for a few days during pregnancy in terms of low birth weight.

Dysbiosis → excess permeability across intestinal wall → allergic and inflammatory problems
Also poor nutrition and increased vaginal infections.

Don't get puffy bloaty weight gain or immunosuppression or bone loss

>15mg corticosteroids daily for >5 weeks over course of 1 year increases significantly risk of osteoporosis.

IBD - Ulcerative Colitis and crohn's – follow by GE due to risk of infectious bowel problems.

Licorice is key!! As anti-inflammatory. Add slippery elm, marshmallow root, and herbs that are healing for bowel wall.

Treat for iron deficiency – yellow dock syrup.

Figs, cherries, raisins - soak first to add moisture.

Red meat – not optimal if bowel inflammation.

Calendula can bring on menses – according to old English literature as emmenagogue but we don't recognize it as being effective. Can use during pregnancy internally as vulnerary for bowel, or St. john's wort.

Raspberry Blackberry for kids with diarrhea. Steep stronger for diarrhea (astringent) than for nourishment

IBS – usually not inflammation, usually neurogenic.

Aloe is great medicine for topical conditions – reduce itching with PUPPP

Make almond oil and coconut oil as very light salve, plantain, calen, chickweed, burdock for topical itching. Don't want to hold heat in too much.

Consider comfrey for topical itching. Diluted peppermint oil as topical cooling anesthetic.

Narcotics or other medications or surgical tape can also cause itching. Betadine used for epidural on back – very irritating if left on.

Cholestasis increases risk for late pregnancy stillbirth for unknown reasons – itch like mad. Only 3 cases in AM practice of cholestasis – none of them had stillbirth. For cholestasis of pregnancy, support the liver and work on the itching. Scut baicalensis and Scrophularia, not licorice b/c don't want a low birth weight baby that is preterm. Dandelion root, artichoke, yellow dock root, milk thistle tinctures support function of liver. Check for uric acid levels to make sure not elevating, but botanicals aren't necessarily going to bring down the levels, but won't escalate. Typically arises in 2nd trimester, not urgency until later as stillbirths tend to happen after mid 3rd trimester. Nothing medical available to change the course of the outcome. Medication can reduce bile acids to reduce itching. Topicals don't do that much. Go with nervine tea, make sure she is getting sleep, take the agitation out of the itching. Very few nervines NOT to use: kava – potential for hepatic disease is too unpredictable faves are passion flower, avena, skullcap, st j wort, lemon balm. Passion flower and California poppy if really can't sleep or use during day if very agitated. Avoid high fat, cholesterol diet that make lv work harder to metabolize cholesterol. Medical literature - # of stillbirths reduced by a small fraction with inducing at 37-38 weeks. Cotton root, blue cohosh to get labor going as a team effort – don't want a stillbirth getting blamed on botanicals.

Anxiety & Depression During Pregnancy

Literature on adjustments for newborns and infants shows outcome for whole family when mom has depression or anxiety is worse.

When you're pregnant, baby is getting same chemical soup. Getting acclimated to an expectation or hormones, heart rate, neurotransmitters. You are the metronome for the baby. Postpartum, babies literally mimic the people around them.

Clinically depressed mom – even 6 wk old baby either stimulate more and more aggressively to get a reaction, or get flat, give up trying to get the attention. Normal dyad baby smiles or makes facial expression, we immediately respond in kind.

No evidence for safety of SSRIs. But not a long of evidence of harm. Increased risk of cleft palate and respiratory hypertension – but not a lot. Risk of untreated depression in the mom is still worse.

SSRIs used for anxiety and depression.

Botanicals – we don't know the safety or harm because we don't have big studies of thousands of women taking st j wort all pregnancy long. But nothing in them pharmacologically that would cause a problem.

Must get 1500-3000mg daily of EFA's.

Sam-e, 5-HTP, we don't know yet but 1600 mg of Sam-e about to be approved as equivalent efficacy to SSRI's. Only 50% of people get benefit from SSRI's.

Motherwort – not during 1st or 2nd tri. Small doses 1 ml here and there for acute use; FAVORITE postpartum antianxiety, postpartum depression and irritability herb.

Lavender and lemon balm very uplifting for depression. Rule out true hypothyroidism if depression during pregn or postpartum. Postpartum hypothyroidism is for unknown reasons a phenomenon. Check TSH. If thyroid function normal, can proceed with botanical tx for depr.

Adrenals – the HPA axis is evolutionary master marvel, keeps us adapting to stress, fight in fection, effectively responding keeps us pushing harder and harder.
Rule on coffee is none is best is 150ml daily max.

BOOKS Penny Simkin, Penny Kissinger – talk about classic psychoemotional stages of pregnancy e.g. common themes in 1st trimester – fear of loss partner, being alone, being a single mom, 2nd tri – fear of becoming a mother, esp if difficult relat with mom, 3rd tri – is the baby going to be ok , worry about birth experience. Normal, natural almost inherent intuitive experiences.

LACK OF SUPPORT FROM PARTNER -= biggest risk factor for PPD and depression during pregnancy. PPD is more common in single women or those lacking partner support. Create another primary relationship, help her know where to get that support from professional for family member or several.

Helping them to set up community food tree – food left on front porch , not to come in and see the baby. Things that minimize fatigue and stress.

Depression before pregnancy increases risk of depression during and PPD.

Blood loss predisposes to depression and fatigue.

NOT NORMAL to GAIN weight after baby born. Check for depression, thyroid.

Adaptogens – support Hypothalamic Pot A adrenal – no overwhelming toxic effects, don't effect specific organs, regulate adrenaline or stress response. Initial research came out of Russian research to get more out of factory workers WRT stamina and immune resistance etc.

Pregnancy is almost an adaptogenic state. Immune and stress tolerance goes up.

Ginseng only in trad formula – Ginseng and Longan formula – Heart, Mind & Spirit for disturbed dreams, can hear pulse in her ear when lays down to sleep, anxiety with emotional disturbance, fab for anemia with heart palpitations (ht working faster to get o2 to body). Otherwise ginseng too heating and stimulating for pregnancy.

Eleuthero during pregnancy no reason not to use it but tend not to use adaptogens during pregnancy. Adaptogens help improve stress tolerance but during pregnancy we can continue to push ourselves rather than saying we're too stressed, let me take it down a notch. Sandalwood on her feet. Sesame oil massage. High nutrition, berries every day, quality protein, SLEEP.

Cytokines in joints are released when body in fetal position. Body says rest when we need to rest.

Licorice – see conditions above

Rhodiola – we don't know about safety during pregnancy.

Do NOT use Schisandra by itself - five flavors fruit – aromatic, sour, bitter, sweet – used in some studies to show increased UT contractility in animals –

ALLERGIC-TYPE SYMPTOMS

Freeze dried stinging nettles as 2-6 capsules – fresh freezing keeps intact the anti histaminic effect of oils in hairs are denatured by regular freezing, tincture etc. **Planetary Herbs is a good company to source this product.** Not same effect from tea made from dried herb.

Often what women describe as “allergies” is actually a sinus condition with nasal coryza - physiologic sinus engorgement assoc with pregnancy.

The amt of sugar in orange juice affects WBC for next 2 hrs. Get sugar out of diet. Dairy. Stress level. Anti-inflammatory diet.

URTI – elderberry syrup, garlic.

UTIs – sugar – hygiene practices.

DEPRESSION

SSRI withdrawal - Baby exposed to SSRI in utero will be more irritable during first 3-5 days of life. Holding and soothing and breastfeeding baby > until drug eliminated.

Milk thistle is hepatoprotective. Can be used with most drugs.

Nervines + EFAs + super high prenatal + B complex + super good nutrition during pregnancy. Have postpartum formula ready - St John's Wort, Ashwagandha, Motherwort, whichever else indicated - within hours of baby being born. Helps empower her that she is preventing PPD from recurring. Even experience of baby blues will stimulate that cascade. PPD tends to kick in day 2-14. Sam-E postpartum.

INSOMNIA

Waking can be due to hunger/low blood sugar. Keep a small container of yogurt, crackers, almond butter, bananas and almonds. Get up, have a snack, read a book, go back to bed. Passiflora, lavender, lemon balm as a combination. Start nervine tea right after dinner then stop 1 hr before bed (to prevent needing to pee in middle of night). Or tinctures 30 mins before bed then right before bed.

Relaxing baths with aromatherapy - lavender bath.

Analgesic and sedative herbs best with CUMULATIVE dosing.

Cannabis is best medicine for morning sickness, labor pain, hyperemesis gravidarum, good for anxiety and insomnia. Don't use if paranoia component to anxiety.

For anxiety + depression - cannabis can worsen depression.

No evidence of harm to fetus if mom smokes discretely during pregnancy.

Chronic pain patients who smoke herb use much less narcotics.

Low THC high cannabinoid products help get the MSK and sedative effects to help with anxiety/insomnia without the buzz/high.

More hallucinogenic response from eating it.

Dosing: pin joints, finely rolled, small amt, couple hits form that.

NAUSEA & VOMITING OF PREGNANCY

Usually from 6-12 weeks gestation, not known what causes it.

Cannabis - see above - Tincture or smoking is effective

Rare that any one agent ameliorates consistently over prolonged period of time except cannabis.

Ginger - effective but some women find nauseating. Recommend varying up the way you take it - tincture in a tiny bit of water, repeat throughout the day, capsules very tolerable, best way is to suck on crystallized ginger candy.

Black horehound (Melissa nigra) v popular among UK herbalists for naus and vom of pregnancy - might help for 2 days...if stops working then switch it up. Keep varying.

Avoid empty stomach, keep crackers around, ginger ale, can put ginger tincture and put into carbonated water, burping can amel., ginger beer with real ginger extract.

Carbonated water with lemon. Grapefruit juice or pineapple juice (can add ginger tincture) before or with meal to help make it easier to eat.

Vitamin b6 can help prevent nausea but not offset it once it starts

Hyper emesis gravidarum. Naus and vom over prolonged period of time with weight loss. Starts 6-12 wk but can persist throughout pregnancy.

Use cannibis. Wild yam and dandelion root tinctures 50:50. Good results with this – sto gets into dry heave spatic thing repeatedly. Wild yam relaxes St spasm. Dandelion helps act like a bitter to act like a bitter, ½ dropper full doses, if vomit just repeat the dose. Every 30-60 mins or until st spasticity starts to go away.

Do ginger separately.

More common on women ambivalent about pregnancy.

Bitters in carbonated water. Anything might make it better or trigger it.

Japanese technique – take rice pack heat in over and put it on belly. More effective is to use sea salt. If damper cooler take ½ cup sea salt, heat in skillet, when salt turns less opaque and releases corn like smell it's ready (2-3 mins). Gets really hot, dump into pillowcase or large sock and fold into pouch and place over stomach. Helps to relax that spasm, retching, gagging.

Nutritive Enema - For dehydration – as being dedhydrated is even more nauseating. 2 tbsp molasses per quart of water, infuse into rectum – absorbs via rectal mucosa *avoid magnesium as might cause laxative/fluid loss rectally

Can also use pedialyte enema.

Enema recipe: 2 tbsp blackstrap molasses, 1 Quart water, ½ tsp salt, add contents of a calcium tablet and something citrusy

Or take electrolyte drink

URINARY TRACT INFECTIONS

Uva ursi is primary herb during pregnancy – use for 3 days minimum even if symptoms gone, or 2 days longer past last day of sx. combine with marshmallow in a cold infusion, or can do a warm one but less tannin from uva ursi and more mucilage from marshmallow in a cold infusion. ½ oz or 14 g of each herb, pour cold water into mason jar and let steep 4-8 hrs or overnight. Drink ½ cup 4 times daily over waking hrs (e.g. q 4hrs).

Cranberry juice unsweetened– between doses of herb infusion take 4oz cranberry juice mixed into 4oz water qid. Add Echinacea tincture 2-2.5 ml or ½ tsp tid-qid and vitamin C 500 mg tid-qid. Should see results within 48 hrs at the most.

If UTI recurs a week later it wasn't completely treated 1st time or got reinfected. Repeat protocol. This protocol is safe for 1st tri.

Differentiate between UTI and kidney infection. UTI usually will not involve fever, chills or flank pain, just malaise with urgency and frequency and pain. KD infxn requires hospitalization and antibiotics. But can also make stronger infusion (1/2 amt of water or 2x as much herb, be aggressive with hydration). Serious KD infection can stimulate labor.

Yarrow is CI because of thujone content.

Most common stimulus of early labor or miscarriage is dehydration. As soon as having contractions, always get in lots of fluids.

Is cranberry juice so acidic that it would interfere with uva-ursi? 2 px hx of significant UTI during pregnancy weren't responding to the tx protocol above.

To alkalinize urine while taking uva ursi – add 2 small caps baking soda daily.

Arbutin hydrolyzation in alk environment allows to work more effectively. But the protocol usually works without alkalinizing the urine.

Cranberry doesn't acidify the urine or bladder but mannose prevents bacteria from adhering.

Wild yam helpful when there is a lot of cramping with UTI, bladder spasticity and pain.

Add licorice for NON-PREGNANT UTI.

Leukocyte esterase more likely to be positive in morning. Even if negative U/A can still have a UTI present, mostly due to E. coli during pregnancy.

Thongs are vector for UTIs. Anal-vaginal intercourse increases transmission of fecal bacteria into urinary tract. Remind about front to back wiping and urinate after sex.

Reduce sugar in diet. Recurrent UTI put on Cran juice throughout the rest of pregnancy e.g. ½ cup frozen cran berries blend with apple juice or fresh apple in juicer. Cran concentrate in water.

Stay well hydrated in general.

70% of family doctors are still giving antibiotics for viral illnesses!

MErsa (methicillin-resistant staph aureus) nurses harboring resistant microorganisms, white coats, doctor's ties

Good literature in nursing home population taking chronic treatment dose of cranberry showing reduction in UTI and incontinence from catheterization and bed sores.

Peririnses for people who self-catheterize – diluted uva-ursi and calendula and essential oil of thyme and/or few drops lavender – rinse after self catheterizing – peri bottle from pharmacy – don't touch bottle to skin before and after cath.

ANEMIA

Iron supplementation not supplemented anymore unless losing blood or have anemia.

GROUP B STREP

Part of our normal flora in 40% of people. It was discovered when transmitted to neonate via vag birth or ROM with ascending bacteria in c-section – babies commonly colonized with GBS, no issue. 50% of babies of +ve women will be colonized. However of the 1% of babies who get sick with it the mortality is >50%.

All women tested at 35-37 wks for GBS. If +ve given i.v. antibiotics within 4 hrs of the delivery, has high protection.

Regardless of whether you then test -ve later in pregnancy you are still treated as if you have it. Or if you go into labor without having your test result back yet, will be given the ABC's during labor. Spares the baby from getting ABCs at birth.

Vaginal suppository for GBS – take aluminum foil the size of a 8x11 piece of paper, fold into a trough, fold sides up. 1/2 cup cocoa butter, ¼ cup coconut oil – heat on stove to get melted, turn

heat off add ½ tbsp goldenseal powder, 15 gtt thyme or oregano essential oil, 15 gtt lavender oil (more antiseptic than rose and covers “pizza smell”), ½ oz calendula oil. Can add myrrh, Echinacea tincture, etc. Want vulnerary herbs, something mucilaginous (marshmallow better than slippery elm vaginally), tea tree oil etc.

Mix together with enough marshmallow root powder to make it thick, almost doughy– will get some separation. This recipe makes 2 moulds. Pour into suppository mould, stir through the trough longitudinally to mix in the caustic ones very well. Put trough in fridge and let it harden. Cut into pinky sized pieces. Put into baggies in fridge or freezer. Insert one vaginally each night, wear a pad to absorb oils as they melt. Goldenseal stains.

Great studies on tea tree for killing several strains of Candida, bacterial vaginosis. Can be caustic.

Boric acid – burns.

Peeled Garlic clove suppository – use after 1 week of previous suppository. Will come out coated in thick vag mucus b/c it’s an irritant. Doesn’t work for trichomoniasis.

The “nudge” theory of botanical medicine Kerry Bone – stimulate the reactionary process that gets local antimicrobial response revved up. 3-7 nights.

Never use thuja and poke topically during pregnancy. Thuja would only be in a really aggressive cervical dysplasia protocol.

Babies can have fever if mom had epidural. Otherwise babies don’t usually get sick. Fever in 1st 3 days of life – refer for urgent evaluation.

EDEMA DURING PREGNANCY

-is normal and physiologic. Don’t need to restrict salt. Put her feet up and relax.

Bit of swelling of hands and feet at end of pregnancy has no correlation with mild edema at end of pregnancy and any bad outcomes.

SUDDEN edema, or hands and face puffy balloon inflated pump – check BP, could be becoming preeclamptic.

NEVER use a diuretic in pregnancy.

SINUSITIS

Lot of normal physiologic engorgement – labia, sinuses, blood volume increases by 50%, may feel more drippy or stuffy

Sinusitis is actual sinus infection maxillary pain, maybe supraorbital pain, copious nasal green d/c, may have fetid breath.

Unless persists past one month or febrile, don’t need to treat it. Risk of bone infection really long term sinusitis.

Topical nasal tx – neti pot rinse with very dilute saline and 1 ggt essential oil of your choice e.g. thyme or oregano, swirl it around really well to break it up.

Can snort goldenseal, burns a little.

Topical application of salve that is aromatic and warming – tiger balm brings circ to area or make own with ginger, horseradish or cayenne. Hot compresses.

Andrographis for sinus infections esp in harder to reach pockets of body – orally for a week during pregnancy.

Echinacea has been studied longitudinally in 1st to 3rd tri with no adverse effects in human pregnancy. Take ½ tsp q 2-4 hrs for mild infxn. 1 tsp every 2-4 hrs if more serious infection. Crampbark + Jamaica dogwood (no studies proving safety during pregnancy but AR and Mary Bove use as a favorite – watch for respiratory depressive effects)

Heat steam – put hot water pot in kitchen sink and euc, oregano or thyme essential oil or make strong infusion of aromatic tea e.g. mint, euc leaves, yarrow in pot – put ess oil in and cover it right up. Then tent the towel right over sink. Keep face 24 inches from steam. open pot lid toward you to let steam escape away from face then slowly begin to breathe the steam. od-bid during pregnancy.

THREATENED MISCARRIAGE

Quieting the Uterus

Tincture 2/3 Viburnum opulus, 1/3 Dioscorea, take 2ml q hour until cramping stops
Encourage rest, quiet the sensorium
Add 10-15% Piscidia (Jamaica dogwood) if there is pain.

Bleeding/Spotting

Blood is itself an irritant and UT blood in it irritates the UR to elicit cramping. Miscarriage can be preceded by spotting.

Vitex works slowly, but low progesterone is not likely to bring on miscarriage in one day. Likely there would be days to weeks of spotting prior to miscarriage. Thus use Vitex agnus-castus. It is NOT contraindicated in 1st trimester. Will not be on CI list in pregnancy in Bot Safety Handbook
Vitex – 5 ml in the a.m. if nauseated eat something first or put honey on spoon. Unique and strong spicy bitter tasting. Vitex can help with sleep? (Kerry Bone?)

Chamalereum (illegal status)

Hormonal tonic –does it inc FSH and LH, ovarian Progesterone production? Don't know, don't care! Its use is appropriate in miscarriage, or with couples who have been trying a really long time to conceive. Midwives say, "There is a baby in every tea cup of chamalereum."

Vitex, Mitchella and Chamalereum - give in combination with Viburnum and Dioscoreum
Cimicifuga racemosa - good safety during pregnancy. Some concern of hepatotoxicity....but Edwart Ernst an UK academic, backseat non-herbalist/almost anti-herbalism wrote about its safety so we are confident it's safe – two studies on Black cohosh that obliterate concerns of hepatotoxicity.

After 14 weeks risk of miscarriage go down considerably. Use this combination from presentation of threatened abortion.

If had a miscarriage before, put woman on this combination as soon as she knows she is pregnant and stay on until 2-4 weeks after time of last miscarriage.

If had miscarriages that are habitual put on the formula minus antispasmodic herbs for 6 weeks to 3 months

Vitex works well in body on 3 months, that's a good time to get pregnant.

Give your body 3 months to heal and recover after miscarriage

Mucus increases during pregnancy – for women who have had miscarriage this is very stressful to see so often include nervines, e.g. lavender, skullcap, chamomile, or stronger passiflora with skullcap. Avena is long-term nervine, almost like adaptogen.

Threatened miscarriage – they should have someone on call for them who can monitor things or transport to hospital if needed.

Ovarian cyst rupture and ectopic pregnancy can present with similar pain – unilateral, often referred to shoulder because of neurologic pattern. Almost pathognomonic. Same with appendix. Can have SOB and pain on breathing.

Very painful – piscidia, corydalis...gelsemium can easily misdose and get resp depression.

Ectopic pregnancy – risk of death

No reason to use antispasmodics until confirmed pregnant, then use to prevent miscarriage if had previous miscarriage.

Antiphospholipid syndrome – tend to increase miscarriage – AR has used these botanicals with APL syndrome patients and they carried the pregnancies.

More than 2 miscarriage, look at constitutional medicines e.g. Peonia, Ziziphus phimosa. Dong Qui and Peony formula for blood tonification and nourishment, Ginseng and Longan for really deficient women.

INEVITABLE ABORTION (process is already happening) or MISSED ABORTION (tissue has not been passed/delivered yet):

****NB** If choose to facilitate completion of a miscarriage or missed abortion based on symptoms, get a confirmatory U/S that there is no fetal heartbeat.

Have someone with the woman while she is taking the botanicals to expel the tissue and bleeding will be more than a period. However, risk of hemorrhage is v. small.

Use herbs for stimulating labor and UT contractility:

Gossypium root bark

Caulophyllum

Angelica archangelica improves ut tone, expel contents

And one antispasmodic herb for cramping, will help efficacy of contraction e.g. one of the Viburnums or Dioscorea.

80% is combo of 1st 3 herbs with small amt of Angelica archangelica.

10-15% of formula as UT relaxant

20ml q hour for 4 hours, then q ½ hr for 4 hours. If doesn't complete abortion that day, repeat protocol next day.

Missed abortion – need cervix to be soft and ripe and dilated to pass tissue.

Large doses Caulophyllum over long term can cause nicotine-poisoning type symptoms – one case report in literature of woman who had been trying to abort using Caulophyllum, recovered in hospital with fluids in 24 hrs.

Quite normal to have bit of cramping and spotting in pregnancy, doesn't necessarily progress to miscarriage.

After 1 month dead fetus unexpelled products can start to decay, get infection or very rarely DIC (disseminated intravascular coagulopathy) - profound systemic hemorrhaging as body has used up clotting factors.

POSTABORTION BLEEDING

After abortion completed: use the same Caulophyllum and Gossypium tincture for a while (can add Capsella but discontinue if clotting develops).

Cinnamon and Erigeron (Canada fleabane) one of the most effective UT antihemorrhagics. 1 dropperful every 10 mins for menorrhagia or postpartum bleeding.

Yarrow (achillea) is another mainstay for UT bleeding. Works most effectively as a tea, 1 cup q hour or sip continuously until bleeding stops. No side effects, risks or concerns postpartum. Can start even as starting miscarriage process and then continue until completed.

Achillea 40 ml, Alchemilla (sp?), Myrica (bayberry bark) or Crocus alba or Hamamelis, cinnamon or ginger for warming and help with pain and cramping, can add Caulophyllum instead of Alchemilla if there are heavy periods and fibroids

Caulophyllum has affinity for ovary – ovarian cysts

Ginger is stimulating and faster than cinnamon, but not nourishing. Cinnamon is more nourishing. Use less for women who run hot.

PREGNANCY ALTAR

For women who have had a miscarriage esp if psychospiritual component, so brave to try another pregnancy

e.g. objects that reaffirm their confidence in nature and in pregnancy, a plant they water every day, etc.

Precious Child Syndrome – so afraid of losing this child that they become more anxious moms and recognizable neurotic symptoms later develop in the child.

Fetal death from 20 weeks gestation or mass 3 g is considered a stillbirth – can't legally put in trash or bury it, it's considered a "dead body".

LABOR

Normal pregnancy is the end of 42 weeks gestation.

Now most pregnancies not allowed to go past 40 weeks.

Protocol in US is can go to 42 weeks without being induced but concerns that longer past 40 weeks, risk of stillbirth go up. Hospital policy etc. Most people do not fit into little box of hospital protocols.

Freedman curve is being reevaluated by people reading the literature. Now 4 cm is considered active labor. Natural physiology of labor doesn't fit the curve.

Maybe only 5 cm would be considered active labor and woman can be sent home. Most of the time if we left the birthing process alone it would happen without the botanicals. Some babies just want to be born in the hospital. When want to get spontaneous labor going under threat of "being induced", 9/10 times botanical induction protocol works.

Post Dates Pregnancy – any time after 42 weeks

Indications for inducing labor – preeclampsia or any hypertensive disorders – induce medically. The only tx for preeclampsia is to deliver the baby. Can also occur postpartum but rarely.

>75% of women who have ROM will be in active labor. Women required to get ABCs by 18 hrs.

Louis Malmadrona – books "Coyote Medicine", "Birthing Normally", was an ER doctor became a psychiatrist, lot of work late 70s and early 80s looking at ROM. No infection after 4 days of ROM when no vaginal exam done i.e. nothing introduced from outside.

Home birth midwives do not give their mothers chorioamnionitis, but it's common in hospitals where every couple of hours someone is doing a vaginal exam. Chorio require antibiotics. To many vaginal exams by residents, interns.

Only do digital vaginal exam when they are sounding like they are 8cm dilated but you think they are really early labor and freaking out, to give a reality check. Or if really getting urge to push too early which would swell the cervix and makes labor more difficult. For most births vaginal exams are not necessary.

If have a classical scar from prev c-section (i.e. vertical on the body) should not induce them at home because uterus can rupture,

If woman has genital herpes, placental previa, umb cord prolapse or baby not lying appropriate position e.g. transverse lie

Bleed at 7-8 months is almost always placenta previa, refer for ultrasound.

Augmentation of labor means cranking up labor that's already going or active labor has stopped and want to resume it.

Labor – intimately connected with SNS. Fear makes pain worse. It also makes you recoil from the pain so you don't open up into it.

Need to attend to psychosexualspiritual body orientation of a woman or all the blue cohosh in the world won't get labor going. Woman needs to get comfortable with her body, unafraid. Birth is a very sexual experience.

Create the safe space as if she is in labor. Go into the day tremendously well rested. Never start labor initiation at night. Day prior she should sleep and eat well and get a good sleep if she can. Have to have cervical ripening. When a woman gets to full turn she may or may not have had effacement or ripening. Feels like lips or cheek rather than nose. Mixed evidence of efficacy of EPO (evening primrose oil) for ripening cervix. Midwives and herbalists who do this see ripening time and time again.

Should be reasonable to start labor induction at 37 weeks but AR waits until about 40 weeks or when woman being threatened with medical induction.

1500mg EPO bid po and 1500mg applied intravaginally - pop capsules open or use as lubricant for sex – with semen ejaculation increases helpful prostaglandins.

Once cervix ripened:

In morning of labor induction, after a good breakfast take:

40% Caullophyllum, 40% Gossypium, 20% Actea, 2ml q hr x4hrs then 2ml q 30 mins x4hrs then stop.

Hr 1: dose

HR 1½: long walk

hr 2: dose

hr 2/12: nipple stim

hr 3: dose

hr 3/12: one of: a) castor oil belly massage from up to down in pattern of contraction, like a wave; b) castor oil not preferred because cathartic and brings on diarrhea, deplete electrolytes so only use on 3rd day of trying to get labor going – 2 oz castor oil, 4oz pineapple or OJ, pinch of baking soda to emulsify in blender, knock it back a few times or c) enema 2c water, 1 dropper each blue cohosh and gossypium

h4: dose

hr 4 1/2: rest, hot shower (downward energy) and/or sex

hr 5: dose

hr 5 1/2: dose

hr 6: dose

hr 6 1/2: dose

hr 7: dose

hr 7 1/2:

hr 8: dose

Repeat next day if she doesn't go into labor by then. Usually works by 2 days.

BLUE COHOSH CONTROVERSY

Historically used since Eclectics and earlier by native peoples. Very effective, UT tonic, ovarian effects. Over past 20 yrs, 3 case reports of babies born to mothers who used blue cohosh to stimulate labor who were born with adverse effects: Cerebral bleed (2) and MI (1) – these case reports have become a big deal!

Traditionally used in last 3-4 weeks of pregnancy as partus preparatory to support natural physiology of labor, less complications, shorter less painful etc. AR never endorsed the use of partus preparators because body knows how to give birth. Unless woman psychologically needs to do something to be confident e.g. “all my sisters and mom needed to be induced”

Eclectics used very concentrated products, more concentrated than our doses and those babies weren't reported to have had strokes and MIs.

AR did survey nationally of midwives 10% reported increased meconium but no inc need for resuscitation or adverse outcomes.

Chemical constituents of blue cohosh one is known to cause adverse fetal outcomes. Agerine also has adverse cardiovascular effects.

Methylcytisine has vasoconstrictive property.

Use wisely and knowingly.

Can increase to 60% gossypium with other uterine tonic e.g. Raspberry, Mitchella instead of Caulophyllum. Or just 80% Gossypium and 20% Cimicifuga.

Raspberry leaf tea 2 cups daily from 2nd tri decreased labor duration, decreased interventions to induce and decreased need for forceps and vacuum and less bleeding after the birth (3 studies)

Once labor gets going don't have to do anything unless labor stops.

TURNING BREECH

Moxa UB 67 – good efficacy in JAMA article 15 yrs ago – 20 mins bilat

STALLED LABOR

“Pelvis, powers and passenger”

Some pelvis are less gynecoid baby's head hitting pelvic musculature causes it to pivot etc. like a gauntlet to rotate and descend

Bad pelvic fracture or repair or contracture from rickets. Malleable pubic symphysis can open 1.5 cm due to relaxin. Use positions, have mom move around a lot.

Tight cervix during labor – Lobelia oil massaged on cervix will release the cervix

Powers – everything mom is going through. Think about amping up Caulophyllum and Gossypium that increase ut contractility. Always combine with antispasmodic e.g. Viburnum or Cimicifuga.

When labor is piddling along mom has emotional issues around labor is Leonurus (motherwort), has UT contractility and antispasmodic. Use when fear and anxiety about birth, emotional lability. ½ dropper or 2ml q 15 mins then q hr until needed to keep labor going. May stop and start again. Primary herb for postpartum stress.

Panax ginseng – chew on small piece of root or tincture during labor. Can give energy on the spot, helps balance blood sugar. Amphoteric – body makes of it what it needs. May get energy or fall asleep and get refreshed.

Can't go wrong with resting and relaxing, good blood flow to baby. Can harm the mom and baby if pushing and pushing until exhaustion, baby more likely to go into distress.

Eating during labor! Eat something nourishing like yogurt and banana, pasta, a comfort food, soup, smoothie.

Herbs to help sleep – Leonurus, Passiflora, Humulus, California poppy (eschultiza), Lactuca (deeper sleep), Lobelia up to 60ggt does not produce vom and retching, small amt of corydalis if pain keeping from sleep.

Mary Bove uses Gelsemium during labor.

Hypericum and Leonurus

Scutellaria

Cannabis

Cup of chamomile and lavender tea and put tincture in. Chamomile is grounding and uplifting.

Massage her feet while drifting off to sleep.

Sandalwood very downward moving, massage feet for grounding.

Lavender aromatherapy is nice during labor. Nurses use aromatherapy - highly evidence based use in hospitals – lavender and mint.

BIRTH ATTENDANT'S KIT

Moxibustion stick
Molasses for enema – mix with water or herbs
Caullophyllum
Cimicifuga
Lavender, rose, sandalwood ess oil
Yarrow tincture
Capsella tincture (Shepherd's purse)
Myrica Tincture
Cinnamon and Erigeron
Leonurus
Gossypium
Passiflora tincture
Lavendula tincture
Humulus
Eschultiza
Cayenne tincture
Hamamelis tincture
Angelica archangelica tincture (re miscarriage)

LABOR PAIN

Ineffective labor – tired muscles hurt more
Mother's perception of pain – often fear and anxiety – use Leonurus, Matricaria, Passiflora, Valeriana. Or 3-5 drops during pregnancy.
If still having pain – are UT contractions in coordinate i.e. more on one side than the other – Viburnum opulus and Actea to relieve incoordination
Piscidia is good, combine with Viburnum and Actea to keep it diluted, corydalis, eschultia
Lobelia might consider
Frequent dosing 1-2 ml q 15 mins until get pain relief. These herbs FACILITATE and do not interfere with effective labor.

Elevated TSH – always recheck. Notoriously inaccurate. But if truly hyper to hypo during pregnancy can cause heart defects and mental retardation.
Iodine deficiency is extremely rare. Just supplying iodine or kelp won't be enough. Most hypothyroid due to endocrine burnout. Use thyroid MEDS during pregnancy. Ok to use BOTANICALS during postpartum.

POSTPARTUM CRAMPS

After birth cramps worse with each progressive pregnancy b/c uterus enlarged
Breastfeeding can elicit sharp-take your breath away cramps - warn women about this.
Use UT antispasmodics
Catnip tea from 1oz herb then take combined tincture 50/50 Viburnum and Leonurus
Catnip tea is also galactagogue, relaxing on uterus, great postpartum relaxing herb.
Leonurus and Viburnums have ut contracting and relaxing constituents.

Cal-mag

Moxibustion – hold over ming men – small of back, keep mother warm, warm foods and teas – moxa for day 1, 3, 7, 10

POSTPARTUM PERINEAL CARE

Antiseptic and astringent herb baths - comfrey, calend, yarrow, sage, rosemary

Whole bulb of garlic, blend with quart of water, gets frothy, put it in bathtub hip-high with 1/-2 cup sea salt, within a couple hrs of birth, qd, bring baby in helps cord dry and fall off faster

Soak kelp frond then roll with rolling pin to soften then apply as compress to perineum to facilitate tear healing. Put on postpartum/menstrual pad.

1st degree tear doesn't get stitches.

Sitz baths bid.

PPD

Adaptogens and nourishment

Make sure getting sleep

BREASTFEEDING

Insufficient supply? Make sure not dealing with thrush – cracked, bleeding and extremely painful. Keep nipples dry and bare if possible, indirect sunlight through window, can wear nursing bra with flaps down. Yogurt on nipples or baby's mouth. Apple cider vinegar rinse (hurts). Antifungal herbs – oregano, thyme, tea tree, then calendula or St. John's wort oil. Calendula salve or plantain salve, chickweed. If comfrey, baby will get a minute amt but to be super cautious avoid. Lanolin as a base to which other oils added. 3-4 gtt essential oils per tbsps lanolin, mix well then add calendula oil, etc. Apply after baby breastfeeds.

Goldenseal, black walnut or aloe for yeast – very staining but use in salve. Can use black walnut tincture in baby's mouth but more likely to rinse baby's mouth

Gentian violet is a coal tar product – not recommended.

RETAINED PLACENTA

Medical establishment considers 30mins to be expected time.

Placenta accreta or increta etc. growth abnormally – requires surgery

As long as no bleeding, placenta can take up to 2 hrs – eat yogurt and a banana, squat, get up and walk etc. and it comes out

Caullophyllum, Angelica archangelica, Gossypium support expelling of placenta.

Mistletoe 20gtt q 30 mins – check BP before and during - can be hyper or hypotensive – usually recommended for tx of HTN.

Don't tug on cord, don't have to massage UT, can give pitocin or methagin,

PREPARING PLACENTA

Wash clots and blood off placenta, wrap cord into bracelet to dry, fill pot to ½ inch below steamer, put in a steaming basket, take thinly sliced fresh ginger and cover and steam for 10 minutes, then repeat on other side. It shrinks. Then slice very thinly, lay pieces on baking tray 250-300F for several hours until completely dessicated, allow to cool and dry, grind into powder then encapsulate – take 2 caps daily (of her own placenta only).

FERTILITY

Really want to tend to your soil – can't just throw a seed on the ground and grow a prize-winning vegetable!

Lifestyle, diet, relationship factors etc. are most important.

90% of all people will get pregnant within first year of trying regardless of age, 25% of remaining people get pregnant in 2nd year and majority of those remaining in the 3rd year, however if people are 40 they won't want to wait until they are 43.

Coming off OCP – give yourself 6 months to reregulate cycle – Vitex helps regulate.

Also tell people this is not 1-3 months thing. Prepare couples to invest a year. Cost of naturopathic visits and botanicals is insignificant compared to \$20,000 fertility meds...just consider milk thistle for general liver support but don't use fertility botanicals or increase liver metabolism.

Take emphasis off getting pregnant than process of being healthy, enjoying their relationship and sex, etc.

For 3 months, we're going to focus on your backache, digestive problems etc. and some of the deeper issues as well.

Folic acid 400 mg, are they getting micro and macronutrients? What are you putting in the soil? Think of a really good biodynamic farmer, diet diary for a week, remove coffee, pop, get diet as organic as possible, identify and address as many environmental exposures, adequate rest, life stressors, childhood issues.

Shativari "she who can handle a hundred husbands" a.k.a. *Asparagus racemosus* – also used to stimulate lactation/galactagogue.

Chamalereum

Tribulus terrestris is an ayurvedic herb however research has been done on Bulgarian grown – increases steroidal saponins and makes it the only pro-fertility tribulus. Increases FSH and LH stimulation and has testostrogenic effects in males and estrogenic in females.

Profertility agent for both male and female is Peruvian Maca – eaten as tuber in Andes while pregnant, animals eat it during pregnancy, highly nutritive and profertility. Generally come off of tribulus and maca when you become pregnant.

Tribulus has small teratogenic effects in frogs, depressed heart activity. Not expectation that would be teratogenic in humans but not known. Use daily then go off it when miss period. Dosing is standardized extract equivalent to 40 g leaf

Serenoa (Saw palmetto) for women with PCOS

And vitex is a classic. (Three different studies women dropped out and couldn't complete study because they got pregnant as side effect of vitex?!?)

One formula for entire cycle for fertility.

PMS or dysmenorrheal herbs could be given just in PMS phase.

Immunity/inflammation WRT fertility:

Esp if tends to have a lot of inflammation, will fight more against something implanting –

Echinacea, Ibisia, goldenseal

Goldenseal is Eclectic UT tonic for membranes and muscle. So bitter that when people take it's really vitalizing. Also gets liver moving. Use very small amt couple caps powder daily as part of what doing with overall fertility.

Discontinue fertility formula once missed a period.

Bupleurum, picorizza, schisandra, silybum

Green tea, pomegranate, tumeric, grape seed, milk thistle, EFAs

Adaptogens esp for men, reducing stress

It's not a fertility protocol. Take getting pregnant off their radar. Individualized health protocol for their individual health issues. Then after 3 months start fertility herbs.

Could use tribulus and maca for men and women.

Sexual tonic health for men – support KD for TCM male formula.

False unicorn is fabulously effective – wait for later to introduce fertility herbs.

Topical oils – cherry brandy liqueur with damiana, vanilla,

Altar that people can do some ritual and inviting that baby in, prayer

Once know they are having normal ovulatory cycles, throw away thermometers and charting, just have sex when feel like it as this often coincides with ovulation.

ENDOMETRIOSIS

One of most common causes of infertility!!

Can have pain any time of cycle including ovulation and menstrual. Uterus lifts or settles at menstruation or ovulation can be very painful due to endometrial/adhesions.

Most commonly endometrial deposits in abdomen, peritoneum, rectal vault. Tissue essentially menstruates into the surrounding area, blood irritates and causes pain and scarring. May have significant peritoneal/pelvic adhesions.

Ablation gets up to 5 yrs of relief but adds more scars. Effective but invasive.

Anti-inflammatories – licorice, bupleurum, curcumin, EFA's, adaptogens because relieve stress and improve systemic anti-inflammatory response through effect on cortisol, green tea, dong quai is fab anti-inflammatory, Peonia lactiflora (white peony), ashwagandha as analgesic and antiinflam and antispasmodic.

Panax quinquefolium, Eleuthero, ganoderma, reishi are relaxing and antiinflammatory, astragalus is antiinflammatory.

Yarrow, cinnamon, ginger, bupleurum can increase pelvic circulation. Cinnamon and ginger are antispasmodic.

Support hormonal regulation to minimize effects of responsiveness of endometrial implants with cycle.

Improve hepatic - Chionanthis (fringe tree), schisandra, taraxacum, rosemary, curcuma, consider hypericum to improve hormonal conjugation. – helps to decrease est and progest b/c effect on cytochromes p450.

Calendula helps move liver circulation.

Topically – not cold alt sitz baths, COP abdo, phytolacca oil over inguinal nodes, all to enhance pelvic circulation.

Rose geranium oil can be added to phytolacca oil as a stimulating aromatic.

Analgesics for endometriosis and ov cysts – pulsatilla, if piscidia and corydalis aren't working consider small amt Gelsemium.

Bowel support as can be painful so become retentive and constipated – Taraxacum, flax, psyllium.

PMS

Bupleurum – smooth liver qi, antispas, antiinflam

Vitex- can aggravate depression – warm women may feel more blue then they get through it, but if can't handle it take them off it. Vitex is also very warming herb.

FIBROIDS

Blood sugar ups and downs/High glycemic → insulin and GH

Asymptomatic ones don't need to be tx beyond diet and lifestyle otherwise conducive to optimal health.

Medial options aren't great and fibroids is the m/c reason for hysterectomy in US.

Can shrink and reduce bleeding from fibroids fairly easily to where not problem. Can still see small fibroids on U/S but asymptomatic.

Pelvic pain and heaving nagging sensation can be eliminated in a few months of botanical tx.

No clear association with OCP

Frequent sensation of having to urinate if fibroids around bladder.

Phytoestrogens,

HOT FLASHES

Spritz bottle with sage infusion.

Phytoestrogens – sprouts esp. red clover, well-cooked legumes, tempeh, flax

Regular leafy greens → more regular BM, better bowel flora, lower overall estrogen load. Greens more important than regular intake of soy!

CASE/formulation example (demonstration):

BLOOD SUGAR

Galega

Schisandra

Cinnamon
Fenugreek
Verbena
Adaptogens – panaxes, ashwagandha
Chionanthus

PELVIC CIRCULATION – use warming herbs

Cinnamon
Verbena
Ginger
Capsicum
Dong qui
Caulophyllum – cold herb
Leonurus – tone, tighten, astringe and support UT tissue, support pelvic relaxation

HEPATIC

Leonurus
Taraxacum root
Burdock
Rumex
Chionanthus – stronger than taraxacum
Hypericum

HORMONAL

Vitex

UTERINE ASTRINGENTS

Cinnamon
Verbena
Caulophyllum
Leonurus
Achillea

Consider energetics of formulation – heat/cold, moist/dry

DISPENSING & DOSING:

5 ml bid-15ml (big dosing)

Give patient a 2oz bottle of formula to start, then after 1 wk if well tolerated give large bottle.

Generally 1:3 to 1:5 tincture strengths; Capsicum 1:10; Toxic herbs more dilute

Book: Medicines from the Heart of the Earth – Cheryl Feldner

Oil can break down stitches – use fresh herb poultice instead