POTION OR POISON?

MEDICAL TREATMENT ALTERNATIVES TO THE PILL

Lester Ruppersberger, D.O., FACOOG,CNFPI
NFP only Gynecologist

“THE PILL’

- Released to US market in 1960
- 10-15 x dose of hormones in HRT
- Over 10-14 million women use
- Works by blocking ovulation, affecting mucus for sperm migration, and endometrial thinning →abortifacient effect

Pill “Conditions”

- Irregular bleeding
- Pain
- Endometriosis
- Polycystic Ovary Syndrome
- Acne
- Hirsutism
- Ovarian Cysts
- PMS
- Convenience

Pill Use

- Primary: as contraceptive-prevent life
- Alternative: natural family planning which uses natural physiologic markers to determine fertile time and then appropriately use to postpone or achieve pregnancy; no side effects; 98-99% effective; easy to learn; consistent with Catholic church teaching; enhances marriage; promotes love and life.

Normal Ovarian Cycle

- Phase 1: Follicular phase- estrogen dominant and prepares follicle for release and thickens endometrium; release of mucus
- Phase 2: Ovulation- release of egg, development of corpus luteum
- Phase 3: Luteal phase- progesterone dominant, elevation of temperature

Menstrual Cycle

- Day 1 is first day of bright red vaginal bleeding
- Cycles vary normally 21-35 days
- Some are anovulatory
- Usual length 3-7 days
- More variable in teens and perimenopause
- Regulated by feedback between ovary and pituitary, both positive and negative

Cooperative Progesterone Tx

- Progesterone vaginal capsules: 400-800 mg q hs q p+3-p+12; day 16-25 (does not interfere with charting)
- Crinone 8% (progesterone vag gel) –one applicator q hs pv pz=3-p+12; day 16-25
- Prometrium 200 mg (micronized progesterone) 1 caps q hs day 16-25
- Other progestins, e.g. norithindrone

Pathologies to Consider

- Polycystic Ovary Syndrome
- Dysfunctional Uterine Bleeding
- Hirsutism
- Ovarian Cysts
- Dysmenorrhea

Polycystic Ovary Syndrome

- Hyperandrogenism
- Chronic Anovulation
- Insulin Resistance
- Must rule out adrenal hyperplasia, ↑ prolactin, androgen secreting tumor
- Unknown etiology, may be inborn error of metabolism

Insulin Resistance

- Leads to DM- 2-5 X risk
- Leads to obesity
- Leads to infertility
- Leads to ↑ cholesterol
- Leads to ↑ risk endometrial Cancer

Diagnosis PCOS

- Abnormal FSH/LH ratio
- Abnormal androgens; test total and free testosterone, DHEAS, TSH, Prolactin
- Fasting blood sugar, 2 hr GTT (75 gm), insulin levels
- 17 alpha OH progesterone
- US ovaries (not very reliable)
- Lipid profile

Treatment of PCOS

- Metformin: lowers insulin levels
  reduces androgen levels
  ↑ SHBG
  helps restore regular cycles
  increases effectiveness clomid
  1500-2000 mg/day ↑ doses

Treatment of PCOS

- Pill: suppresses ovary, ovulation, creates pseudo pregnancy, ↑ lipids, ↓ SHBG ↓ androgens, regulates cycles

There are no double-blinded placebo studies documenting superiority of treatment with pill, other than symptoms. No comparative studies.

Alternative Therapy

- Could cycle menses with cooperative progestin therapy; no down side
- Could treat hirsutism with topical creams, spironolactone, removal tx (laser)
- Could treat obesity with diet, exercise, lifestyle changes
- Infertility responds well to clomid

HIRSUTISM

- Idiopathic (no androgen excess)
- PCOS (common in about 50%)
- Congenital adrenal hyperplasia
- Cushing’s syndrome
- Androgen secreting tumors
- Ethnicity

Evaluation

- Hx, physical exam, ethnic background
- Total and free testosterone
- DHEAS, Androstenedione
- Fasting 17 OH Progesterone
- TSH, Prolactin

Treatment

- Shaving, plucking, waxing, electrolysis
- Laser- permanent but expensive
- Vaniqua (temp. dihydrotestosterone antagonist)
- Spironolactone (200 mg /day)
- Pill – not always successful
- Finasteride(1-5 mg/day)
- Flutamide (250 mg/day)

Dysfunctional Uterine Bleeding

- Menses erratic, variable to ≤ 21 days or ≥ 35 days and sometimes lasting longer than 7 days and heavy with clotting.
- End of cycle brown discharge
- Heavier than pad q 2 hrs (saturated)
- Mid cycle bleeding
- Anemia
- Obesity (conversion of androgens to estrogens)

DUB TYPES

- Ovulatory: more common but with luteal phase deficiency-cycles usually shorter
- Anovulatory: less common with usually longer cycles
- Must rule out all other pathology-pregnancy, cancer, fibroids, polyps, infections, foreign body (IUD), coagulopathy, thyroid disease
- ? Tubal ligation syndrome

Evaluation

CBC, platelets, PT, PTT, Factor V Leiden

HCG, TSH, Prolactin,

Endometrial biopsy

Ultrasound

Pap

Cultures

Physical exam and History

Treatment

- NSAID’s
- Cooperative progesterone therapy
- Vitamins and Iron/Folate
- Exercise
- Acute bleeding- IV estrogen, 25 mg/4-6h
- Fluids, rest
- Endometrial ablation
- Progesterone (esp. norithindrone acetate)
- CAM- Magnesium, Chlorophyll, Cayenne

Goals of Treatment

- Relieve/alleviate acute bleeding
- Prevent further episodes of non-cyclic bleeding→ anemia
- Decrease pt's long term risk complications from anovulation, i.e. endometrial Cancer
- Improve overall quality of life

Ovarian Cysts

- Usually benign, self-limiting
- Normal physiologic- could be pathologic
- 200,000 hospitalizations annually
- Usually <5 cm= physiologic; >5cm possibly pathologic
- Types: simple, complex, hemorrhagic, dermoid, neoplasm

Symptoms

- Pain, acute onset- rupture
- Ovulatory- mittelschmerz
- May mimic acute AP, IBS, IC, Endo
- May be recurrent

Treatment

- Oral progesterone- needs high doses
- IM progesterone in oil- 200 mg IM
- Analgesics, rest, heat
- Rarely laparoscopy
- Usually resolves within 3 cycles
- May be recurrent
- Could consider Lupron – chronic recurrence

Dysmenorrhea

- Painful menses with normal anatomy
- Lasts 1-3 days
- Severe in 15% adolescents
- Types: primary- physiologic-no other cause

  secondary- other pathologies, e.g. endometriosis, adenomyosis, dub/clots, cervical stenosis (post LEEP/cryo)

Differential Diagnosis

- Irritable bowel syndrome
- Interstitial cystitis
- Endometriosis/adenomyosis
- Psychogenic- sexual abuse
- Chronic PID

Treatment

- NSAID's
- Heat
- Exercise-aerobic- ↑β endorphins
- Magnesium- 800-1000 mg/day
- Pain management
- Laparoscopy- Rule out other etiol.

Endometriosis

- Diagnosis by laparoscopy only
- Present in 33 % ♀ with chronic pelvic pain
- Occurs in 7-13% population
- 38 % infertile women

Etiology

- Unknown
- Retrograde menstruation
- Hematologic/lymphatic spread
- Is an estrogen dependent disease

Symptoms

- Secondary dysmenorrhea
- Chronic pelvic pain
- Dyspareunia
- Many asymptomatic

Treatment

- Medical: progestins, danocrine, GnRh agonists, pill
- Surgical: resection, cautery, laser, ablation
- Tx of choice= Lupron (poss. Add back); greater than 12 mos →reversible bone loss

Summary

- Many ♀ reproductive dysfunctions currently treated by pill without appropriate scientific evidence that pill improves pathology; it just improves symptoms
- Symptom improvement not a bad thing ……..BUT, benefit must outweigh risk

Pill Side Effects

- Increased risk of blood clots
- Increased risk of phlebitis
- Increased risk of breast cancer
- Increased risk of heart attack, stroke
- Increased risk of liver tumors
- Increased risk of abnormal lipids
- Not physiologic; suppresses nl function, creates state of pseudo-pregnancy

Summary

- There ARE other methods of treatment
- Contraception is intrinsically evil
- One cannot do an evil to achieve a good
- IF one thinks pill is BEST tx for an individual, must look at circumstances re: sexual activity, abstinence, etc.
- Principle of double effect
- PRIMUM NON NOCERE