

PELVIC VENOUS CONGESTION SYNDROME

13th Annual MITT Interventional Radiology
and Endovascular Therapy Seminar

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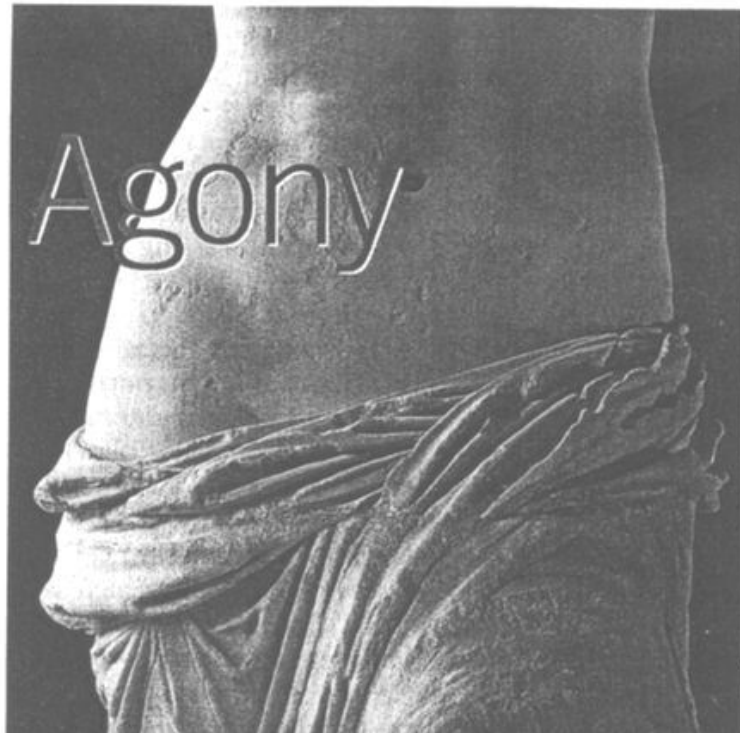
CHRONIC PELVIC PAIN

health check

A Private Agony

Women with chronic pelvic pain know how hard it is to treat. Finally, breakthrough therapies for one of medicine's most baffling conditions.

BY DIANE UMANSKY



CHRONIC PELVIC PAIN

- Definition: Pelvic pain that is present for at least 6 months
- Estimated to account for 2-10 % of outpatient gynecological referrals
- 10-35% of laparoscopy done in the U.S. is for diagnosis of CPP
 - Study is “normal” in 9-35%

Reiter RC. Clin Obstet Gynecol 1990; 33(1):130-136

CHRONIC PELVIC PAIN

- 10-12% of hysterectomies performed in the U.S. are for CPP
 - Approximately 70,000 procedures
 - 0.1% mortality = 70 deaths
- 14% of patients referred to SDNH pelvalgia clinic had prior TAH/BSO
 - “Hysterectomy may accomplish discontinuation of follow-up rather than amelioration of pain”

Reiter RC. Clin Obstet Gynecol 1990; 33(1):130-136

CHRONIC PELVIC PAIN

CAUSES

- Physiologic
 - Ovulation
 - Menstruation
- Infection (PID)
- Genitourinary
 - Ovary/ovarian cyst
 - Endometriosis
 - Fibroids
 - Malignancy
 - Prolapse
 - Cystitis
 - Calculi
- Gastrointestinal
 - Ulcerative colitis
 - Crohn disease
 - Diverticulitis
 - Irritable bowel syndrome
 - Malignancy
- Musculoskeletal
 - Lumbar disk disease
 - Sacral canal stenosis
 - Spondylolisthesis
 - Perineus syndrome

PELVIC VENOUS CONGESTION SYNDROME

POSSIBLE ETIOLOGIES

- Anatomic dysfunction
- Orgasmic dysfunction
- Psychosomatic dysfunction
- Hormonal dysfunction
- Iatrogenically induced dysfunction

El-Minawi AM. *In: Pelvic Pain, Diagnosis and Management*, Lippincott, Williams & Wilkins

PELVIC VENOUS CONGESTION SYNDROME

POSSIBLE ETIOLOGIES

- Anatomic dysfunction
 - 1875 Richet - “Tubo-ovarian varicocele”
 - 1949 Taylor - “Vascular congestion and hyperemia”
 - 1968 Chidekel - Dx of “female varicocele” by selective ovarian venography
 - 1980’s Beard - Improvement with vasoconstrictors

PELVIC VENOUS CONGESTION SYNDROME

SYMPTOMS

- Pain
 - Dull ache (sacral backache), deep dyspareunia, worsened by standing, premenstrually
- Menstrual irregularity
 - Dysfunctional uterine bleeding, vaginal discharge
- Urinary
 - Frequency, urgency, burning on micturition

PELVIC VENOUS CONGESTION SYNDROME

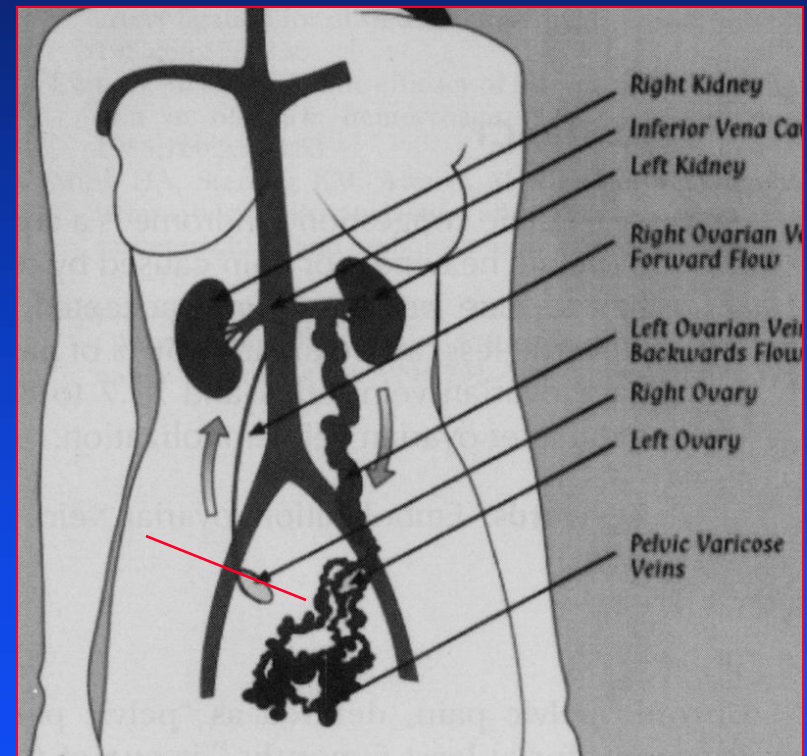
SYMPTOMS

- Gastrointestinal
 - Nausea, cramps, flatulence, similar to IBD
- Nervous system
 - Headache (migraine), fatigue, insomnia
- Psychiatric and emotional disturbance
 - Anxiety, depression, dependency, suicidal ideation

PELVIC VENOUS CONGESTION SYNDROME

SIGNS

- Vulvar varices
- Tenderness at the “ovarian point”
 - 1/3 of distance between ASIS and symphysis pubis
- Ovarian point tenderness + post-coital ache
 - 94% sensitive
 - 77% specific



Beard RW et al. Br J Obstet Gynaecol 1988; 95: 153-161.

PELVIC VENOUS CONGESTION SYNDROME

DIAGNOSIS

- Laparoscopy
 - High rate of false-negative studies
 - Trendelenburg positioning
 - High intraabdominal pressure
- Venography
 - Transuterine (Rocket needle)
 - Painful, requires heavy sedation or anesthesia
 - Transfemoral/transjugular
 - Selective gonadal vein catheterization
 - Transvulvar
 - If varices are present

DILATED PELVIC VEINS

SIGNIFICANCE

- Common finding during laparoscopy
- Common finding at CT
 - » 47% of asymptomatic women
 - » Mean diameters
 $R + L = 8.8 \text{ mm} + 9.1 \text{ mm}$
 - » 15/16 with dilated veins were parous
 - » 9/18 with normal veins were parous
 - » Dilated veins found in
65% of parous women
10% of nonparous women



Rozenblit AM et al. AJR 2001; 176: 119-122.

PELVIC VENOUS CONGESTION SYNDROME

SURGICAL TREATMENTS

- Hysterectomy
 - TAH/BSO
 - 22% failure rate
 - Potential for psychological conflict if there is a significant emotional overlay
- Ovarian vein ligation
 - Transretroperitoneal approach
 - Laparoscopic transperitoneal approach
 - Overall “cure” rate 52%, improvement 17%

PELVIC VENOUS CONGESTION SYNDROME

MEDICAL TREATMENT

- Hormonal therapy (MPA)

- Reduces diameter of congested veins and improves symptoms

- Takes several months to see effect

- Pain returns when treatment is discontinued

- Breakthrough bleeding significant problem (18%)

Reginald PW et al. Br J Obstet Gynaecol 1989; 96: 1148-1152.

PELVIC VENOUS CONGESTION SYNDROME

RADIOLOGICAL TREATMENT

- Outpatient procedure
- Conscious sedation
- Transjugular/transfemoral approach
- Venography details veins and collaterals
- Issues

Contrast

Radiation

SELECTIVE VENOGRAPHY

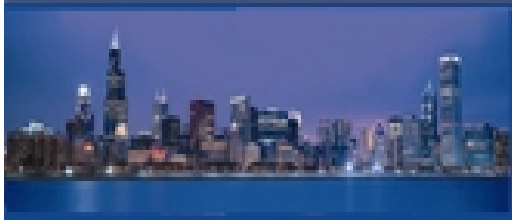


PVCS LITERATURE REVIEW

Investigators	Cases	Technique Used	Cured	Complications
Sichlau et al.	3	Stainless steel coils	2 complete	None reported
Machan et al.	22	Lipiodol / n-bucrylate Stainless steel coils	11 complete 6 partial	None reported
Capasso et al.	19	Stainless steel coils n-bucrylate	11 complete 3 partial	Two ovarian vein perforations by guidewire
Tarazov et al.	6	Stainless steel coils	6 of 6	One mild hematoma at puncture site Two patients had low grade fever >24 hrs
Cordts et al.	9	Stainless steel coils Gelfoam	8 of 9 >80%	Two with mild-moderate return of symptoms 6 and 22 months afterward
Cotroneo et al.	20		12 complete 8 partial	3 relapses
Maleux et al.	41	Lipiodol / n-bucrylate Stainless steel coils	24 complete 4 partial	Two glue PE's, treated with analgesics
Chang et al.	56	Stainless steel coils Sclerosing agent	65% decrease VAS score	2 relapses, 2 stray coils
	176		66% total 16% partial	

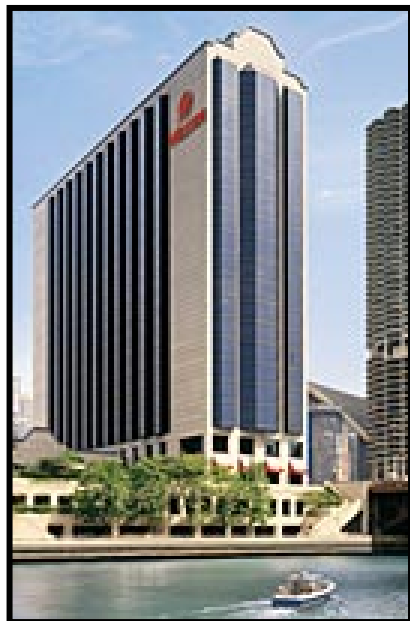
SUMMARY

- PVCS is a significant cause of chronic pelvic pain
- Transcatheter venography and embolization can be performed on an out-patient basis using conscious sedation only
- Many patients report significant symptomatic improvement



Welcome to the

**13th Annual MIIT Interventional Radiology
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October 28-30, 2004

**Chicago Westin River North Hotel
Downtown Chicago**

