

# PMS / PMDD

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[www.studd.co.uk](http://www.studd.co.uk)

**PMS or PMDD ??????**

MAJOR GENERAL  
BENEDICT ARNOLD  
AMERICAN PATRIOT  
RESIDED HERE FROM  
1796 UNTIL HIS DEATH  
JUNE 14, 1801



# Charles Dickens



- St Luke's hospital for the insane 1846  
 $F > M \times 2$

“most common in women of the servant class”

# Depression twice as common in women than men

- .. Community studies
- .. Hospital admissions
- .. Suicide attempts
- .. Prescription of anti-depressants
  
- .. **Why?**

**Doctors often make mistakes by  
not learning the cause by  
accurate questioning, but they  
proceed to heal as if they were  
men's diseases  
(Hippocrates Diseases of  
women)**

**Depression in women is very often different in women than men and the causation and treatment different because of the hormonal component of estradiol and progesterone in women**

# Depression associated with ↑ in

CHD

Strokes

Hypertension

Metabolic syndrome

Osteoporosis

Alzheimers

Non suicide deaths

Obesity

Schmidt P 2007 Menopause international

Premenstrual depression

Post natal depression

Climacteric depression

## “Reproductive Depression”

Studd J Nappi R 2012 Reprod Endocrin

Premenstrual depression  
(good mood during pregnancy)

Post natal depression  
(return of PMS as periods recur )

Climacteric depression

# Reproductive Depression

In later life after years of depression and antidepressants they will state that they were last well without depression during her last pregnancy

**REPRODUCTIVE DEPRESSION and  
RESPONSE TO ESTROGENS**

**Pre-menstrual depression**

Magos Studd (1987) BMJ

Watson Savvas Studd (1995) BMJ

**Post-natal depression**

Gregoire Studd Kumar et al(1996)Lancet

**Climacteric depression**

Montgomery Studd Appleby et al (1985) Lancet

Soares 2004

Review Studd J Panay N 2004 Climacteric

## EDITORIAL

# Why are estrogens rarely used for the treatment of depression in women?

JOHN STUDD

*London PMS and Menopause Centre, 46 Wimpole Street, London, W1G 8SD*

The short answer to this question could be that they do not work, but that is not true. It is much more likely that a turf war is developing between psychiatrists and gynaecologists/endocrinologists for this common disorder. This is not surprising as we are all products of our training, with hormones and vaginal bleeding an unchartered country for some. As depressed women would normally gravitate to their family doctor and to psychiatrists, it is usual that psychiatric intervention including anti-depressants would be the first line of therapy. However, there are

last well, the frequent reply is that it works. In the last pregnancy, several years previously, perinatal depression occurred, followed by postnatal depression which then became chronic. It is constant as the menopause approaches. Patients respond well to moderately high-dose transdermal estrogens. Unfortunately, the prevalence of depression with these reproductive events is sought in a history taking by psychiatrists. The enquiry about how many good days a woman experiences, reveals not only the

# Increase in antidepressant medication in US adult population 1990 – 2003

Mojtabai Psychother Psychosom 2008 77 : 83-92

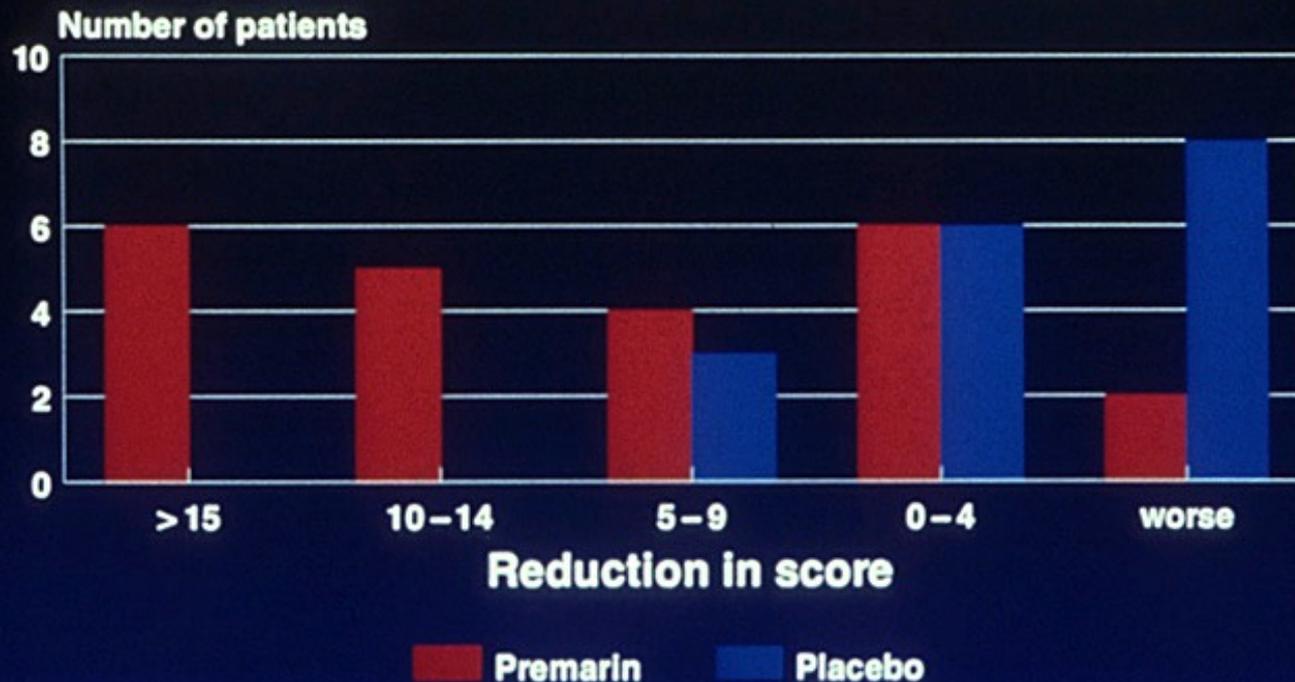
	1990 -92	2001-2003
Total %	2.2	10.1
Age 18-24	1.2	5.2
Age 45-54	2.6	14
White	2.4	12.4
Black	1.3	4.9
Low income	2.1	12.1
High income	2.3	9.8

# Severe Depression – the first estrogen placebo controlled study

- .. Klaiber ('79)
- .. Severely depressed in-patients
- .. Commenced CEE in high doses (5mg) and increased weekly to a max. of 25mg each day
- .. Highly significant reduction in depression scores in CEE treated group

# Estrogen and Major Depression

## Improvement in Hamilton Depression Scores: Premarin versus Placebo



(Klialber et al 1979)

# PREMENSTRUAL DEPRESSION

# Treatment of PMS (PMDD)

# Treatment of PMS (PMDD)

Keep

# Treatment of PMS (PMDD)

Keep

Them

# Treatment of PMS (PMDD)

Keep

Them

Away

# Treatment of PMS (PMDD)

Keep

Them

Away

From

Doctors

**Who have no knowledge or interest  
in hormone therapy**

# Effect of hormones on mood

- Estrogen very often improves mood
- Testosterone improves mood , energy and libido
- Progestogen often produces depression tiredness bloating etc

# PMS

- .. Symptoms cyclical - every month ?
- .. How many bad day a month ?
- .. How many very bad days a month ?
- .. How many good days a month ?
- .. Worst day ?
- .. Best day ?

# PMS

- .. Symptoms cyclical - every month
- .. How many bad day a month ? 14
- .. How many very bad days a month ? 7
- .. How many good days a month ? 14
- .. Worst day ? +14 or -2 and -1
- .. Best day ? +1,2,3

# Certain ways of treating PMS

Wait for menopause

Pregnancy

Hysterectomy and BSO

Hysterectomy and ovarian preservation does not help

# Progestogen intolerance and compliance with hormone replacement therapy in menopausal women

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Nicholas Panay and John Studd<sup>1</sup>

Academic Department of Obstetrics and Gynaecology, Chelsea and Westminster Hospital, 369 Fulham Road, London SW10 9NH, UK

# Treatment of the premenstrual syndrome by subcutaneous estradiol implants and cyclical oral norethisterone: placebo controlled study.

A L Magos, M Brincat, and J W Studd

BMJ 1986

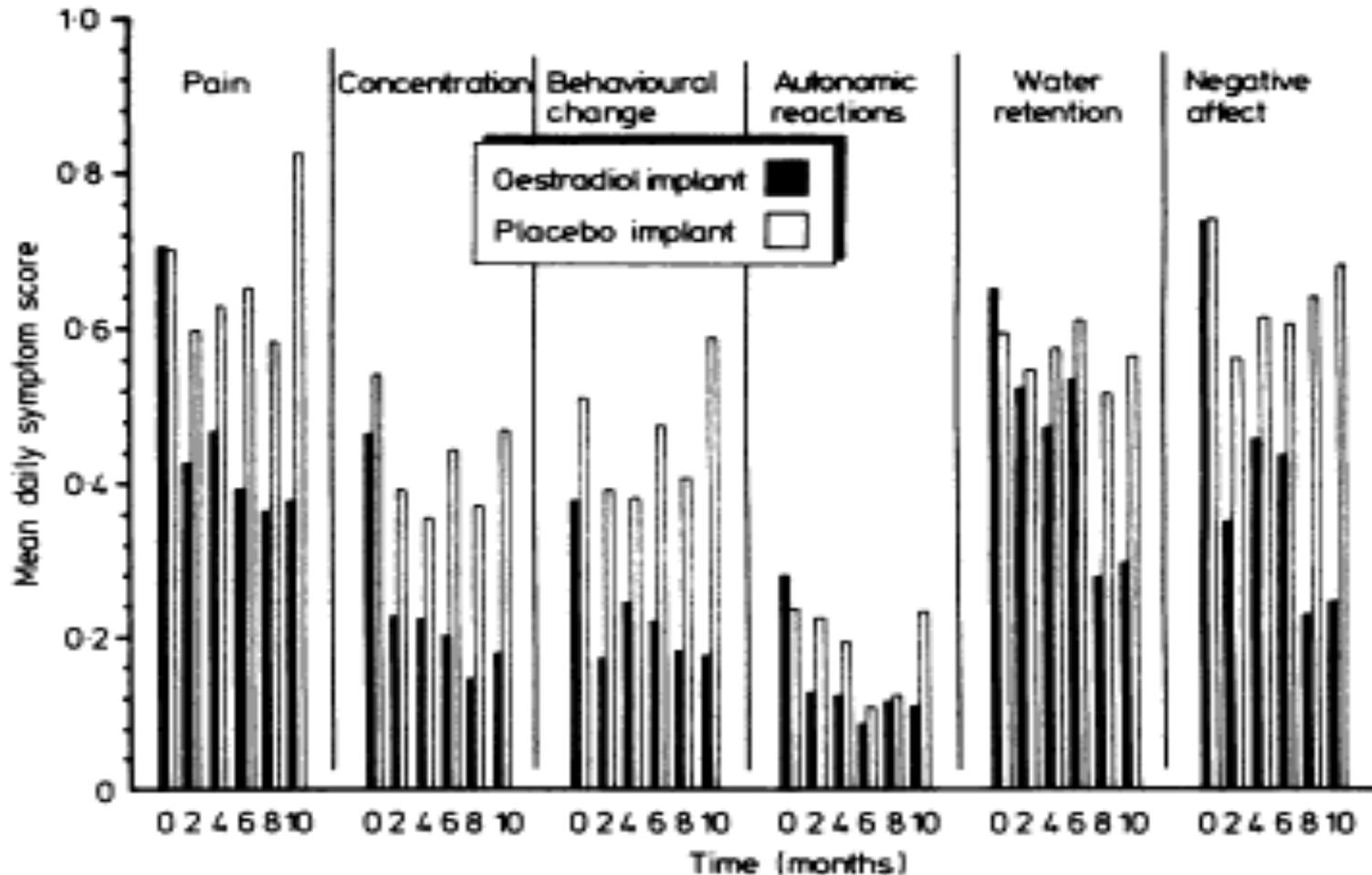


FIG 3—Effect of treatment on mean daily symptom scores.

# Treatment of the premenstrual syndrome by subcutaneous estradiol implants and cyclical oral norethisterone: placebo controlled study.

A L Magos, M Brincat, and J W Studd

BMJ

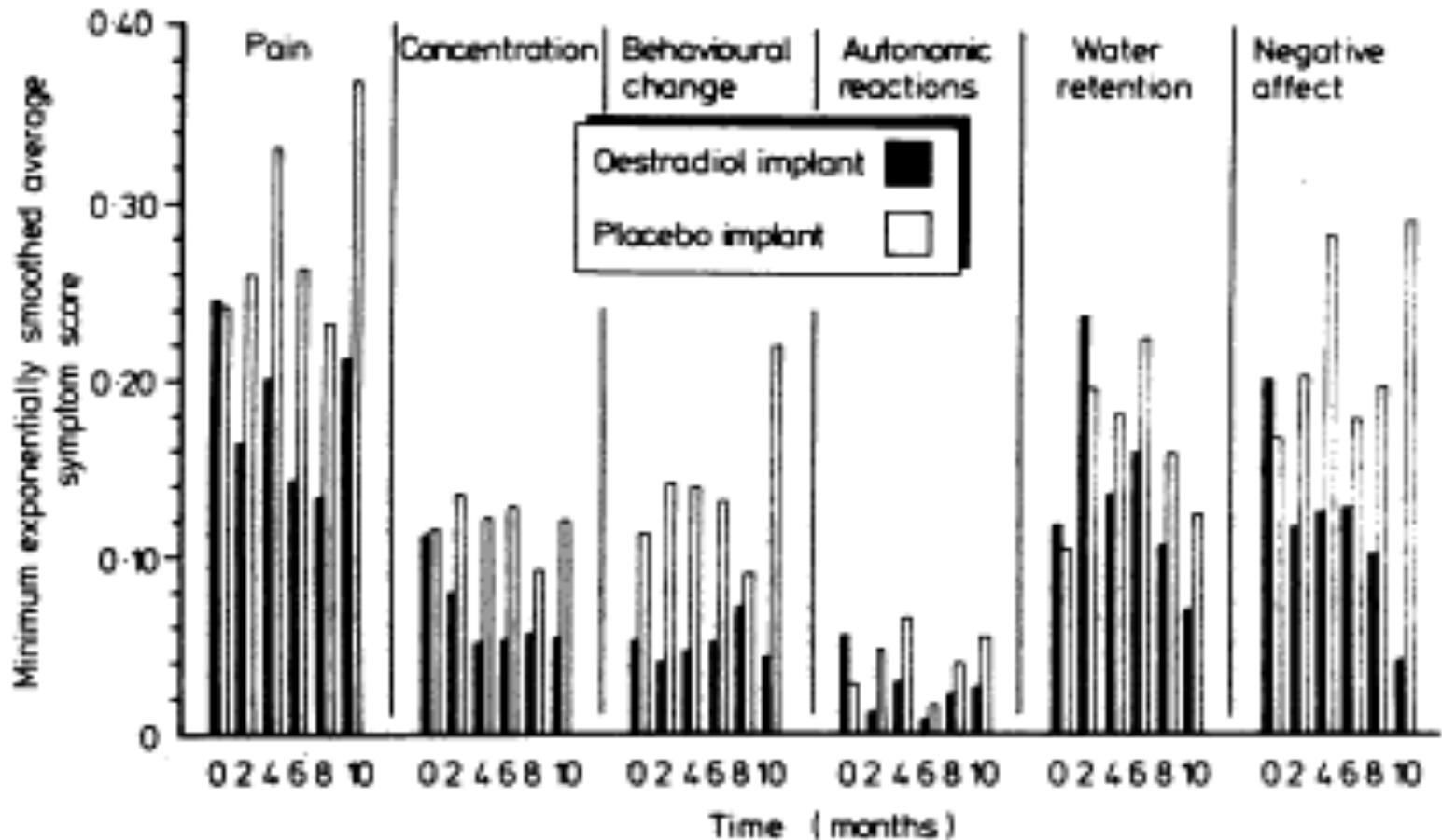


FIG 4—Effect of treatment on minimum exponentially smoothed average symptom scores.

# **A model for the causation of the Premenstrual Syndrome**

**Magos Brincat Studd**

PMS is caused by the cyclical hormonal changes produced by the ovary following ovulation ( or anovulatory cycles )

The effective treatment of severe PMS should be based on the abolition of these changes by suppression of ovulation or cyclical ovarian activity

# Hormonal treatment for PMS (PMDD)

Transdermal estrogens gel, patch or implant

GnRH

OC ? Yasmin or Yaz- not good

Progestogen only pill-the worst

TAHBSO with E and T replacement

**?? V low dose cyproterone  
acetate daily but no data**

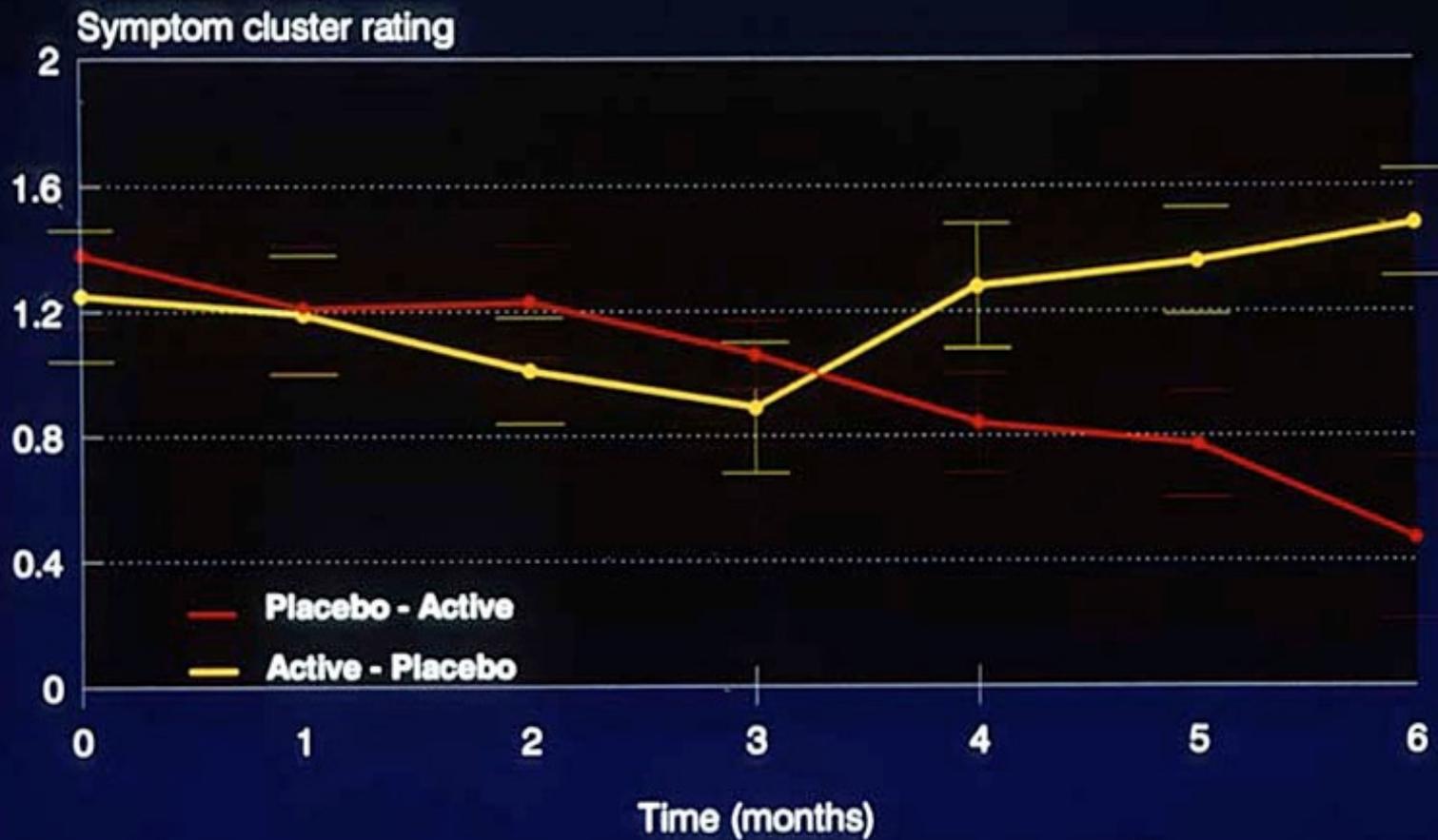
# Transdermal oestradiol

Crossover study  $17\beta$ estradiol 200 $\mu$ g patch vs placebo

Watson & Studd Lancet 1989

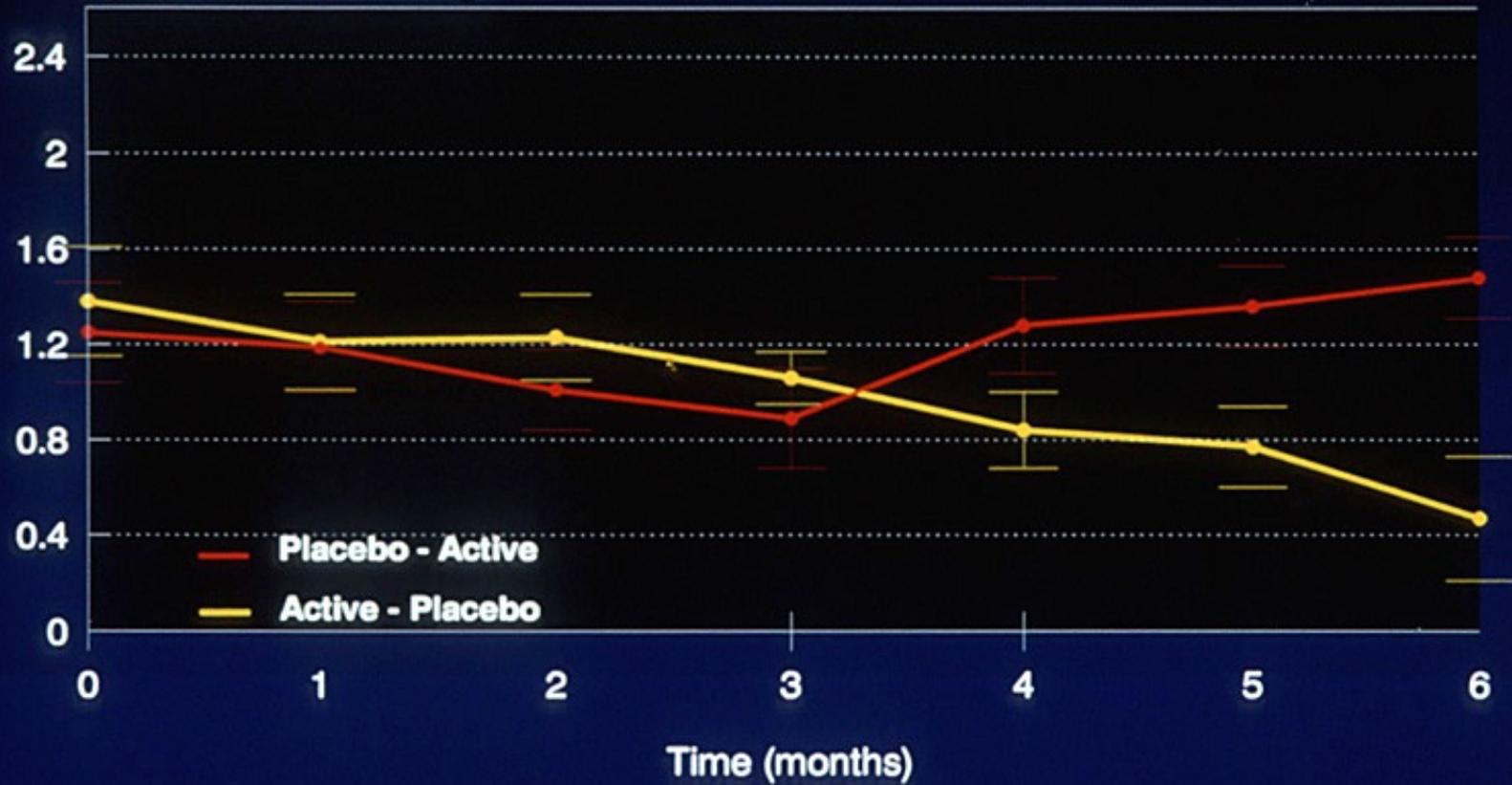
60% reduction in physical and psychological symptoms of PMS

# MOOD SWINGS



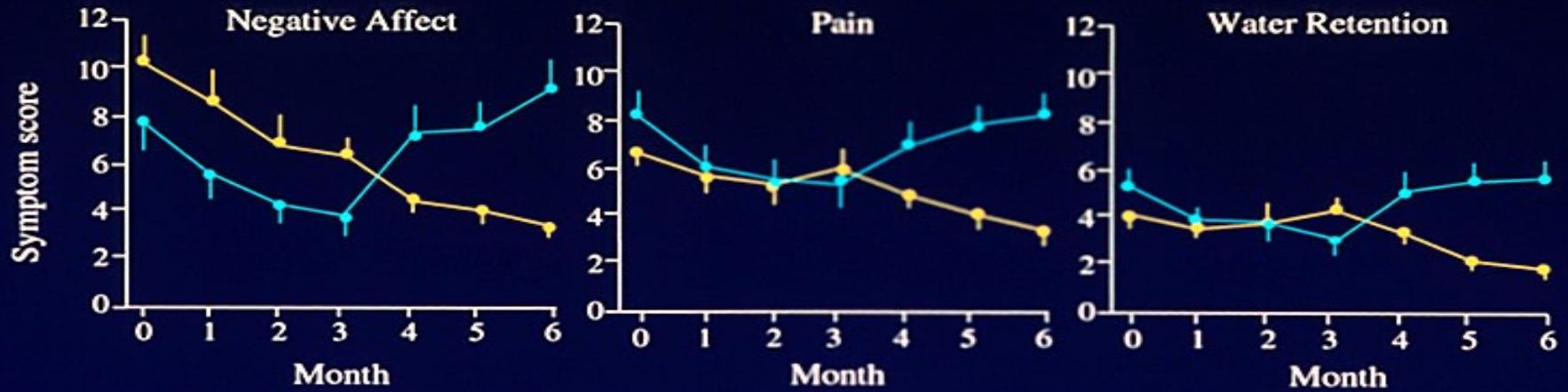
# DEPRESSION

Symptom cluster rating



# PMS Study 200 $\mu$ g oestradiol patches

Watson Savvas Studd 1989 Lancet

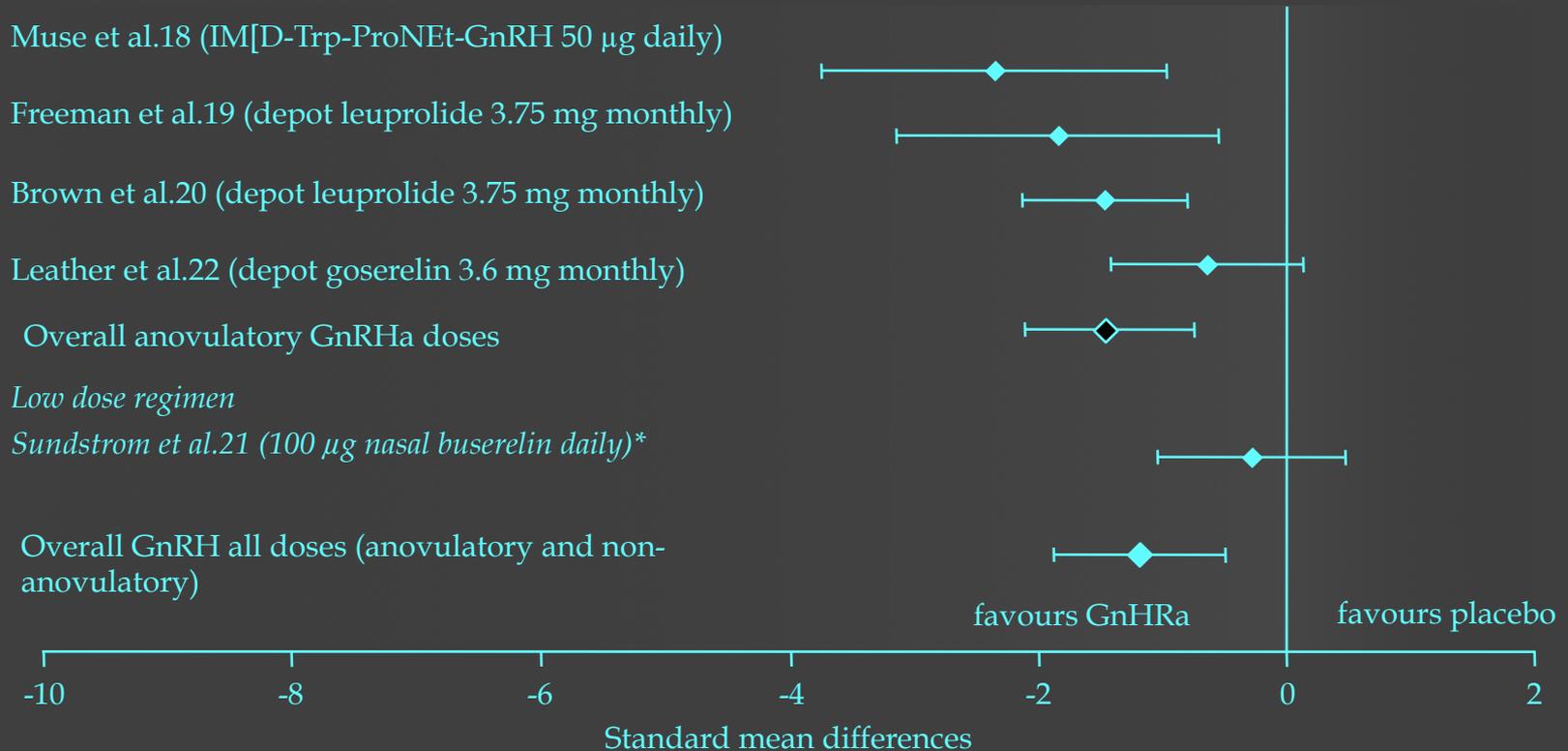


Three MDQ symptom clusters

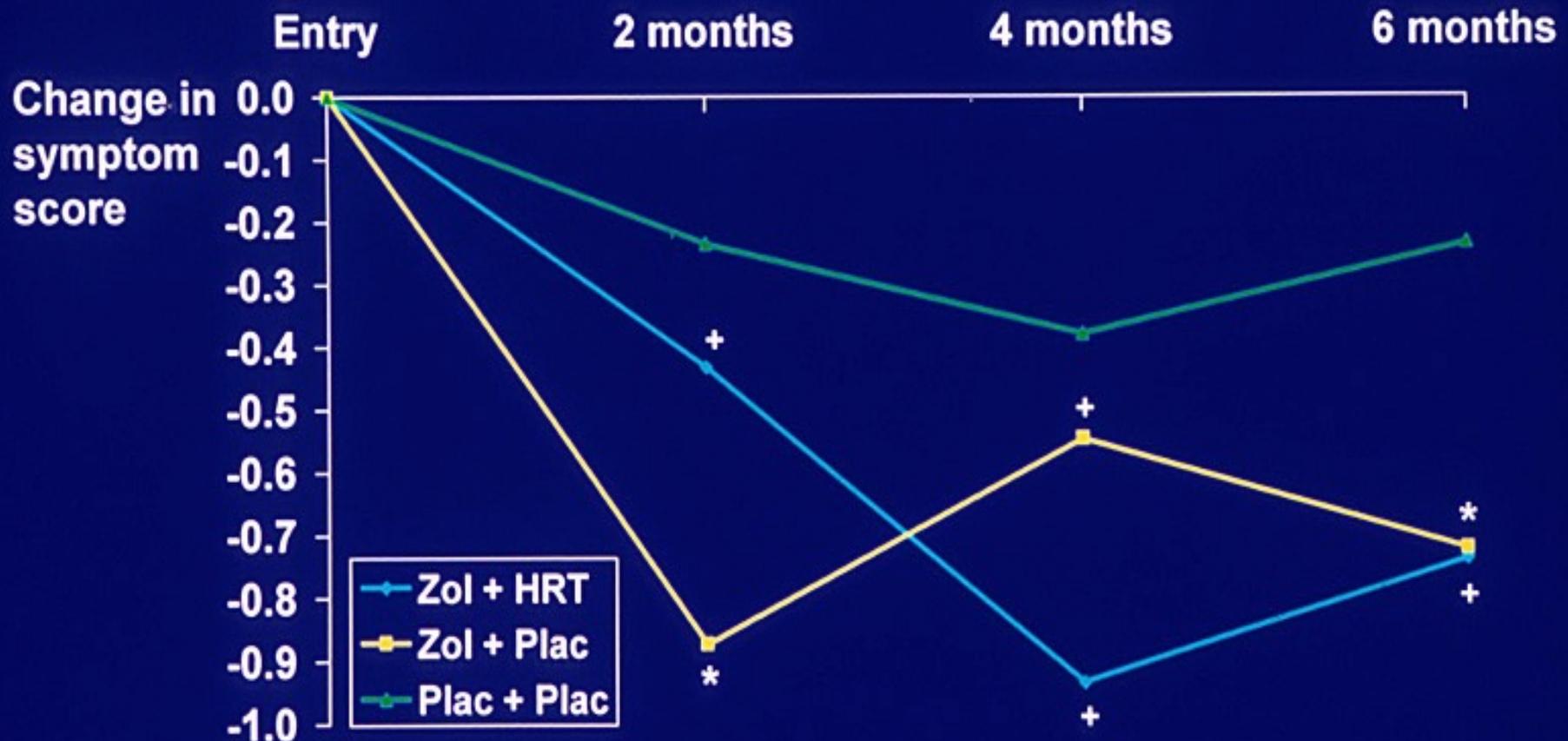
Mean (SE) ESA<sub>max</sub> scores ■ = group I (active treatment to placebo,  
● = group II (placebo to active treatment). Crossover at 3 months

# Suppression of ovulation by GnRH analogues

# Meta Analysis of RCTs (GnRH<sub>a</sub> vs placebo)



# Change in depression



\* p < 0.05 vs Baseline and Plac + Plac

+ p < 0.05 vs Baseline

# Suppression of ovulation by GnRH analogues

- .. But needs add back with E+P
- .. Or E +Mirena IUS
- .. Livial
- .. Danazol

PROGESTOGEN NECESSARY IN WOMEN  
WITH INTACT UTERUS BUT PMS  
PATIENTS ARE OFTEN PROGESTOGEN  
INTOLERANT

Less potent progestogen/progesterone

Shorter 7 or 10 day course of  
progestogen

Vaginal progesterone

Mirena progestogen IUS

hysterectomy + BSO

# TAHBSO + HRT

- .. 14 women
- .. Unresponsive to conservative therapy
- .. Danazol completely relieved symptoms
- .. TAH/BSO effected lasting relief

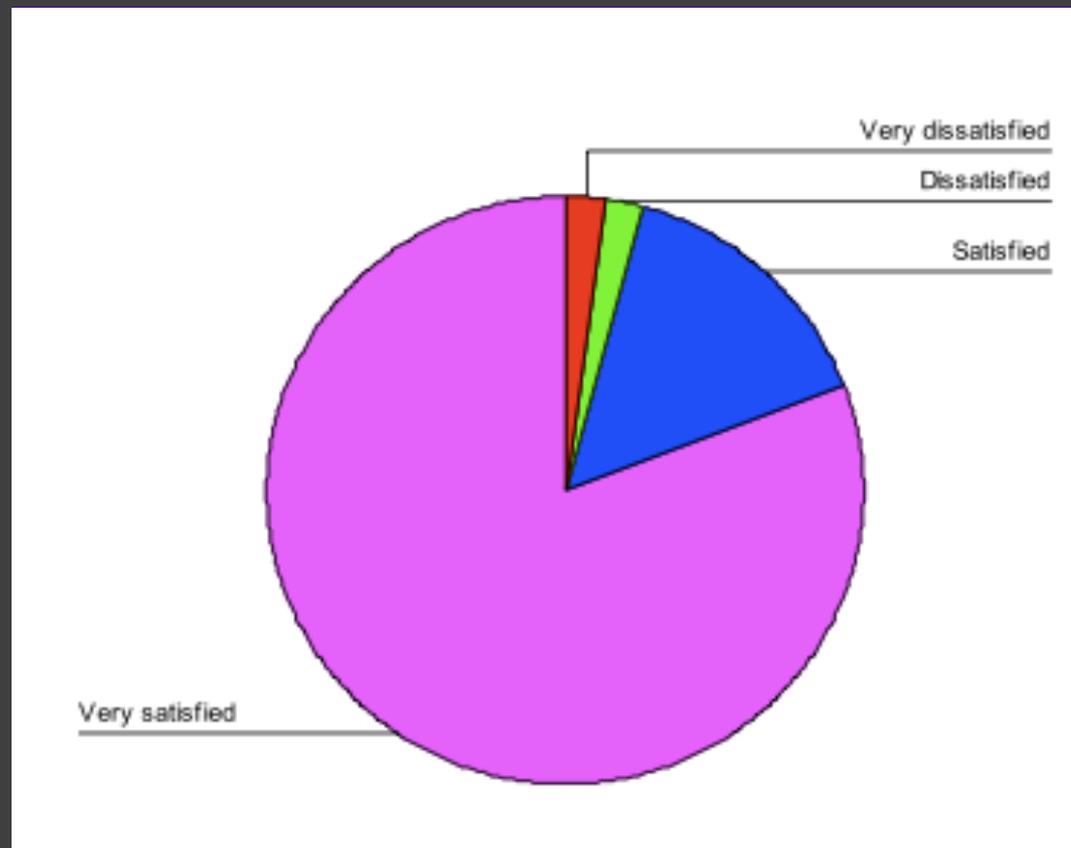
*Casson l Reid R L; Am J Obstet Gynecol, 1990*

# TAH BSO for severe PMS (PMDD)

- .. 47 women over 10 years
- .. Median age: 42 years (IQR 39.8 - 46.6)
- .. Suffered mean 9.68 years (SD 6.8)
- .. Mean treatment prior to referral: 3.57 years (SD 2.0)
- .. Mean specialist treatment: 1.21 years (SD 0.4)

# TOTAL ABDOMINAL HYSTERECTOMY AND BILATERAL SALPINGO-OOPHORECTOMY FOR PREMENSTRUAL SYNDROME

Cronje Vashisht Studd 2004 Reprod Med 20 1113



**Transdermal estradiol and  
testosterone “always”  
necessary after TAH+BSO in  
premenopausal women**

# Female androgen deficiency syndrome (FADS)

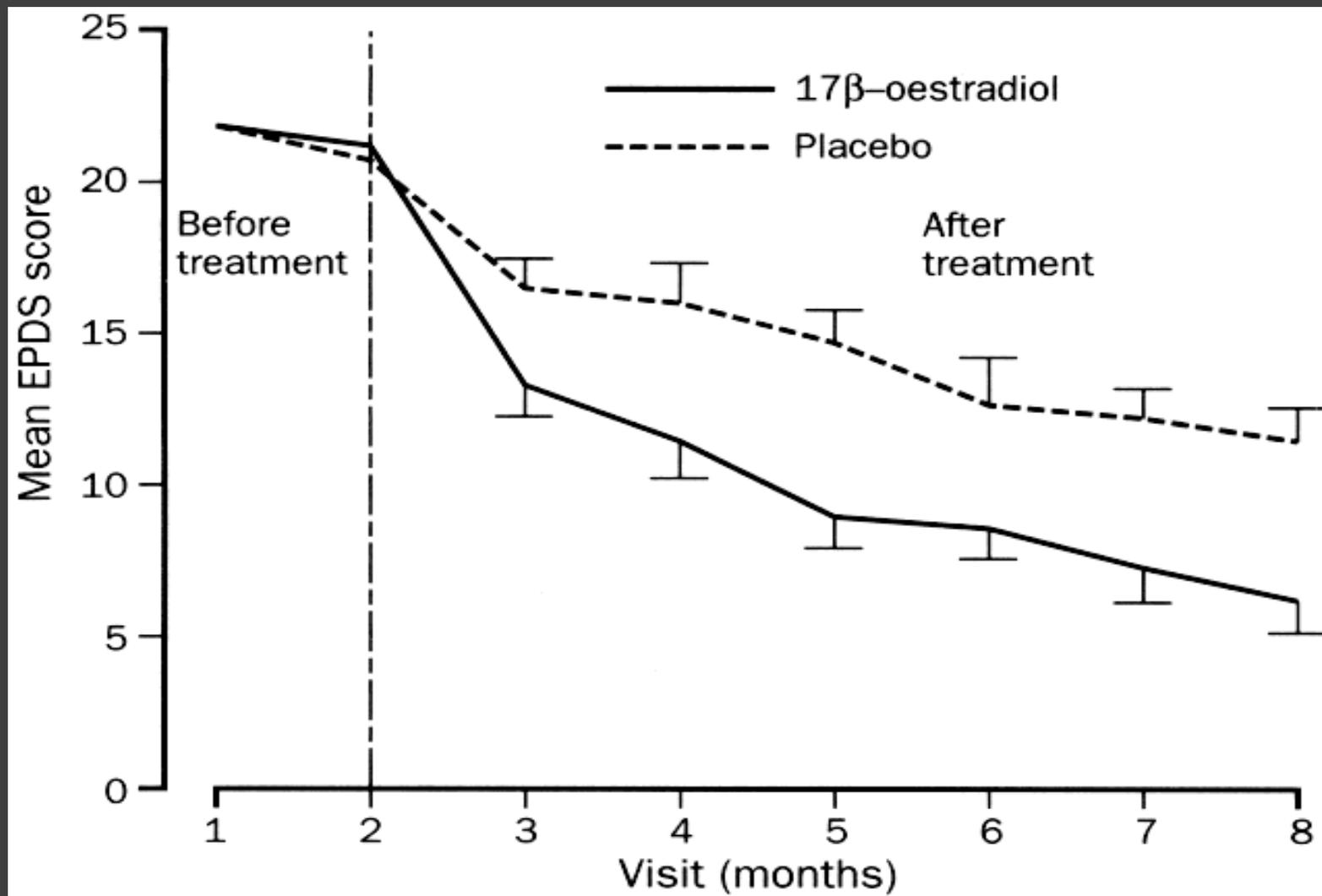
- .. Depression
- .. Tiredness
- .. Loss of libido
- .. Loss of self confidence
- .. Headaches

# POST-NATAL DEPRESSION

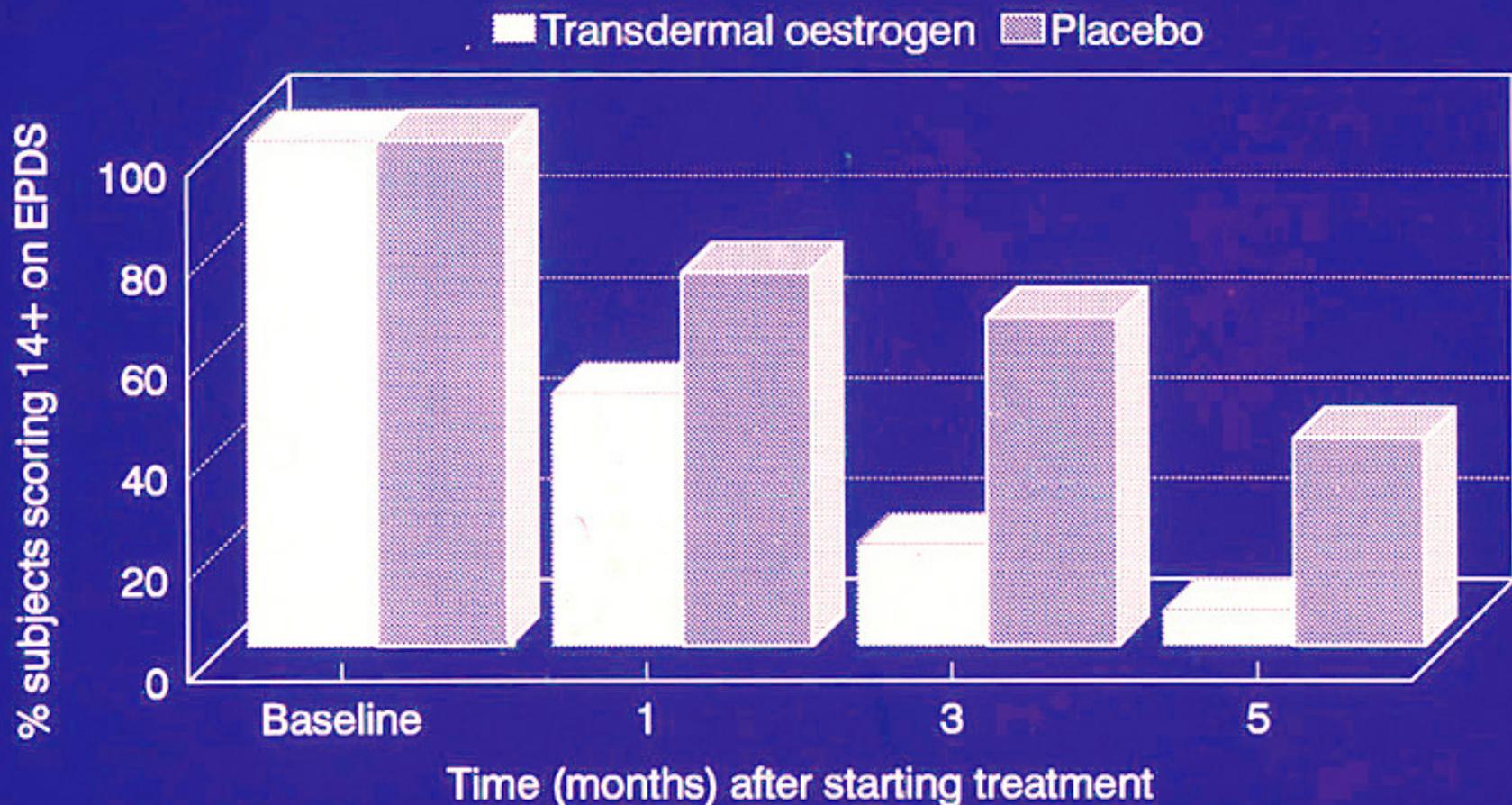
# **Transdermal oestrogens in the treatment of postnatal depression**

# Transdermal oestradiol in postnatal depression

*Gregoire, Studd et al Lancet 1996*



# Proportions of subjects scoring above screening threshold for major depression



# Estrogen deficiency in severe post-natal depression

Ahakas et al 2002

- .. after 1 week recovery in 12/23 patients
- .. After 2 weeks recovery in 19/23 patients
- .. (but uncontrolled study in women with very low E2 levels)

# Oestrogens and progestins in the prevention and treatment of post natal depression

Dennis CL Ross LE Herxheimer A 2008

Progestogen given within 48 hours of birth is associated with a significantly higher risk of developing PND

Transdermal oestrogens are associated with a greater improvement in depression scores than placebo in women with severe PND

# Oestrogens and progestogens for preventing and treating postnatal depression

- Transdermal oestrogen better than placebo

*Gregoire Kumar Studd 1996*

- Depot progestogen worse than placebo

*Lawrie et al 1998*

# Can we mimic postnatal depression hormonally?

- .. 16 women, 8 with a history of postnatal depression
- .. Induced hypogonadism with leuprolide acetate
- .. Simulated pregnancy by adding back supraphysiological doses of E and P for 8 weeks, and then withdrawing both steroids

*Bloch M. Am J Psychiatry 2000*

**And lactation ???**

**Probably worse when breast  
feeding stops and cycles return**

## “Reproductive Depression”

Studd J Nappi R 2012 Reprod Endocrin.

Premenstrual depression  
(good mood during pregnancy)

*Post natal depression*  
( *Prolonged Lactation helps but  
return of PMS and depression as  
periods recur* )

Climacteric depression

# PERI MENOPAUSAL DEPRESSION



# Depression in the transition phase

Women with a history of PND and PMS have a higher risk of developing depression in the perimenopausal years (Studd and Panay 2006)

BUT

Women without a history of depression have twice the incidence of depression on entering the transition phase compared with women of the same age who remain premenopausal

Cohen LS Soares C et al 2006 Arch Gen Psychiatry 63 385-90

# Climacteric Depression

- 8 year Longitudinal
- In depressed women 4x ↑ CES-D scores in menopause transition

HR 4.29 (2.39 -7.72)

- Depression 2.5 x (OR, 1.25-5.02;  $P=.01$ ) more likely during menopause transition in women with no history of depression

*Freeman EW, et al Arch Gen Psych 2006 63(4):375*

# Pre menstrual symptoms and perimenopausal depression

- .. 70 depressed perimenopausal women  
    Compared with
- .. 35 **non** depressed perimenopausal women
- .. 26% of depressed and 9% of nondepressed women reported pre menstrual symptoms

Richards Rubinow Daly Schmidt 2006 Am J Psych

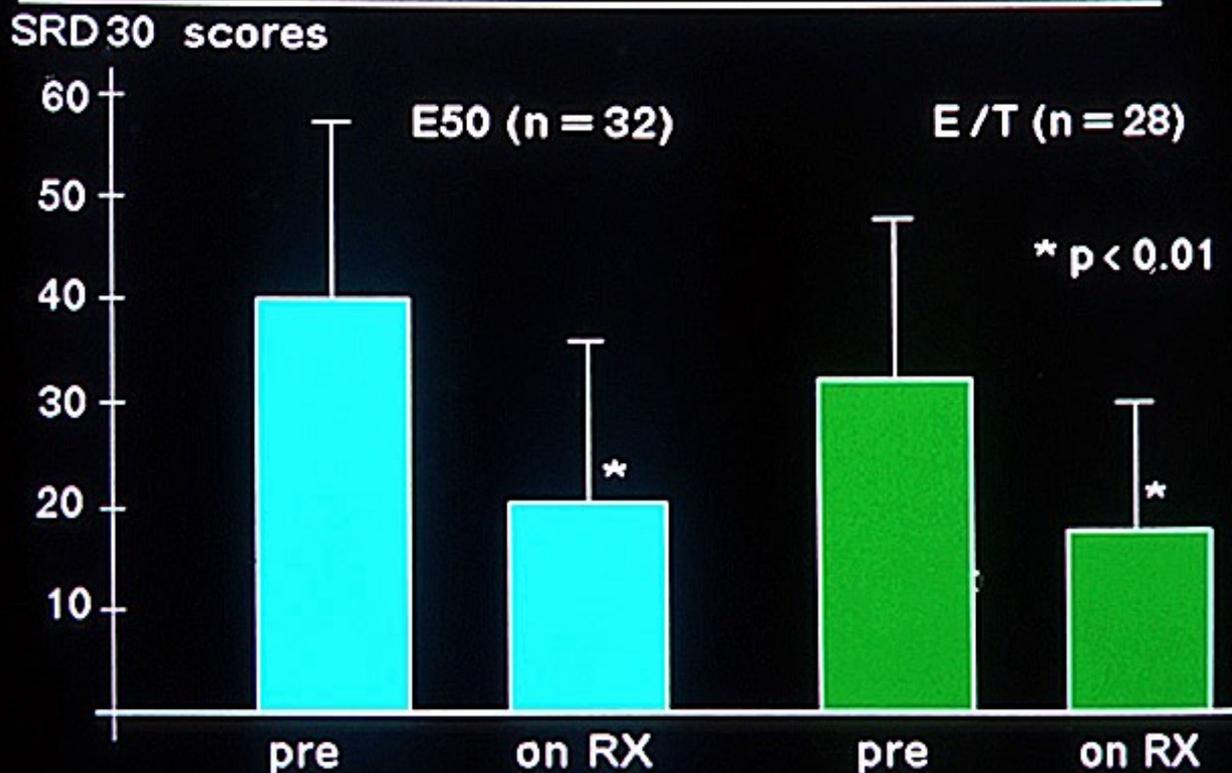
# Effect of oestrogen and testosterone implants on the psychological disorders in the climacteric

*(Montgomery, Studd Lancet 1987)*

Both oestrogens and oestrogen - testosterone better than placebo at two months in the peri-menopausal woman with depression

But no improvement in the depression of post-menopausal women with this treatment

Mean (+1SD) SRD 30 scores in the 2 treatment groups at baseline and at follow-up  
(mean duration of follow-up = 23 months)



# Transdermal estrogens in peri-menopausal depression

50 depressed peri-menopausal women

26 Major depressive disorder

11 Dysthymic

13 Minor depressive disease

100  $\mu\text{g}$  estradiol patches in 12 week placebo controlled study

- Soares et al 2001 Arch

Gen Psych.58 529-34

# Transdermal estrogens in peri-menopausal depression – placebo controlled trial

Soares et al 2001

- .. Remission of depression in 17/25 ( 68% ) of E2 patients
- .. Remission of depression in 5/25 ( 20% ) of placebo patients
- .. Regardless of DSM-IV diagnosis

# Depression and the menopause: why antidepressants are not enough 2009

- .. “The combination of antidepressants with HRT seems to offer the best therapeutic potential in terms of efficacy , rapidity of improvement and consistency of remission in the follow up”

Graziottin A Serafini A 2009 Menopause International 15 76-81

# Hormone therapy for depression

## Diagnosis

- Hormone levels not helpful
- History most important
  1. PMS as teenager
  2. Relationship to periods
  3. History of post natal depression
  4. History of good mood during pregnancy
  5. Often have cyclical menstrual headaches
  6. How many good days a month?

# Hormone therapy for depression

## Treatment

- .. Transdermal E2 100  $\mu\text{g}$  or 200 $\mu\text{g}$
- .. Often requires plasma levels of  $>600\text{p.mols}$  for effect and to suppress cycles
- .. Consider adding testosterone for depression and libido
- .. Require cyclical progestogen or Mirena IUS if patient still has uterus
- .. Ultimately the most effective long term treatment may be E + T + Mirena IUS- or even TAHBSO + HRT

# PMS or BPD

# **Severe PMS and Bipolar Disorder- a frequent tragic confusion**

# Bipolar depression

Longstanding “bipolar depression”  
diagnosed by psychiatrists often  
disappears when severe PMS /  
PMDD is treated with transdermal  
estradiol or TAHBSO

Original article

# Severe premenstrual syndrome and bipolar disorder: a tragic confusion

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## Abstract

Bipolar disorder and severe premenstrual syndrome (PMS) have many symptoms in common, but it is important to establish the correct diagnosis between a severe psychiatric disorder and an endocrine disorder appropriately treatable with hormones. The measurement of hormone levels is not helpful in making this distinction, as they are all premenopausal women with normal follicle-stimulating hormone and estradiol levels. The diagnosis of PMS should come from the history relating the occurrence of cyclical mood and behaviour changes with menstruation, the improvement during pregnancy, postnatal depression and the presence of runs of many good days a month and the somatic symptoms of mastalgia, bloating and headaches. Young women with severe PMS do not respond to the antidepressants and mood-stabilizing drugs typically used for bipolar disorder.

**Keywords:** Premenstrual depression, bipolar disorder, postnatal depression, estrogens, hysterectomy

The treatment of severe premenstrual syndrome (PMS) or premenstrual dysphoric disorder (PMDD) by ovulation

women is that they will have teenage premenstrual mood swings and when the hormone levels cease to fluctuate as

# Case History 1

- 1 First seen Dec 2005 Age 36
- 2 Many in patient visits for “manic depression”
- 3 PMS since teenager
- 4 Para 2 aged 4 and 3
- 5 Good mood during pregnancy x2 è PND x2
- 6 Many SSRIs did not help- did not take suggested Lithium
- 7 estradiol patch “99% better” – like pregnancy -- gels implant
- 8 Progesterone intolerance TAHBSO Oct 07
- 9 Well no depression no antidepressants .

Doctors do not understand what a near death experience cycles can produce

- .. The same story but 20 years of lithium and now has renal failure with GFR of 30 mls/min
- .. Now off all antidepressants and mood stabilizing drugs

## Case History 2

- .. First seen aged 44 Nov 05 depression / CFS for 20+years
- .. Had TAH with ovarian conservation 2000
- .. Has cycles depression irritable 7good days a month
- .. Has been in patient x 3 . 10 years of sodium valporate ,ritalin, lithium , prozac , rivotril, assendine amoxapine , tegratol from 1987
- .. Transdermal estrogens Oct 06 “best summer for years and years”
- .. Estradiol and testosterone implants every 6 months –
- .. *no CFS no depression but unhappy because she can not remember her children growing up !*

# Case History SS

- .. First met 1968 aged 26
- .. Depression from aged 20
- .. Was sterilized age 28 during PhD studies - No children
- .. Very successful author and academic .
- .. E and T for PMS/Depression aged 32
- .. Now aged 62 . Well and after 30 years will not come off HRT as her GP suggests

# Case History SS

- .. First met 1968 aged 26
- .. Depression from aged 20
- .. Was sterilized age 30 during PhD studies - No children
- .. Very successful author and academic .
- .. E and T for PMS/Depression aged 32
- .. Now aged 62 . Well and after 30 years will not come off HRT as her GP suggests
  
- .. Diagnosed Bipolar in USA aged 20 .
- .. Lithium for two years and anti depressants for 20 years
- .. Sterilized due to misdiagnosis !!

# But a failure

- .. A fifty-year-old woman diagnosed with postnatal depression and bipolar disorder that attempted suicide nineteen months after the birth of the baby. She survived but the baby died. Severe depression started in 1987 but there had been a history of moderate premenstrual depression. She was very well during pregnancy, breastfed for one year and had good bonding with the child, but nineteen months after the birth became depressed and was not helped by antidepressants .
- .. She was admitted to hospital for one year. She has had many drugs for twenty years including Venlafaxine and lithium. She has had eight episodes of ECT during this time.
- .. Some little improvement in depression with estrogens. No longer suicidal.
- .. Psychiatrist refused further treatment and removed all NHS support services

## The 8 characteristics of severe PMS not found in bipolar disorder

1. Depression related to menstrual cycle
2. The relief of depression during pregnancy
3. Post natal depression
4. PMS when periods return
5. PMS becomes worse with age to perimenopausal depression
6. co-existence of somatic cyclical symptoms i.e. mastalgia headaches or bloating
7. Usually have monthly runs of 7-10 good days a month
8. Cyclical depression but rarely has highs

The 8 characteristics of severe PMS not found in bipolar disorder  
retrospective audit of 10 patients with “bipolar disorder” who have been “cured” with hormone  
therapy

1. Depression related to menstrual cycle 10/10
2. The relief of depression during pregnancy 9/10
- 3 .Post natal depression 8/10
4. PMDD when periods return 10/10
5. PMDD becomes worse with age to perimenopausal depression ? 5/5
6. co-existence of somatic cyclical symptoms i.e. mastalgia headaches or bloating 10/10
7. Usually have monthly runs of 7-10 good days a month 10/10
8. Cyclical depression but rarely has highs 9/10

# PMDD or Bipolar Disorder

- .. **1) There was a history of mild or severe PMS as a teenager.**
- .. All 10 patients had such a history involving cyclical depression starting soon after puberty. In 5 cases this was recognized as being a result of simple teenage behavioural and period problems that were not regarded as abnormal but 4 cases were given antidepressants before the age of 20

# PMDD or Bipolar Disorder

- 2) There was a relief of depressive symptoms during pregnancy
- In all eight of the patients who became pregnant depression was not a problem in 6 who claimed to be in good mood during pregnancy in spite of first trimester problems such as nausea and tiredness but 2 remained on their antidepressants throughout. All eight patients reported that they were at their best with least or no depression during their pregnancies

# The ultimate irony

“women with bipolar disorder have an 8 fold increased incidence of postnatal depression”

Jones 2010

True and logical if BPD was in fact severe PMS

Studd 2012

# Bipolar – Postnatal Depression

- .. Women with Bipolar I have 50% chance of PND

- .. Women with bipolar II have 40% chance of PND

  - Perinatal episodes across the mood disorder spectrum

  - Di Florio Jones I 2013 JAMA Psych.70 168-175

And others in last 5 years with no mention of PMS or PMDD

# Depression and oestradiol

Optimal oestradiol level of  
600 + pmol/L for alleviating  
hormone responsive  
depression

# Climacteric depression

- BUT it is the changing plasma levels rather than the absolute values that are important in producing symptoms.

*Brincat & Studd Lancet 1984 1:16-18*

# Safety of estrogens for depression

- .. Young premenopausal women
- .. Transdermal route and little/no effect on hepatic coagulation factors
- .. Minimal progestogen or none if after hysterectomy
- .. Most recent data confirms decrease in CHD and no increase in breast cancer
- .. Safer and more effective than antidepressants

# Complications of antidepressants and mood stabilizing drugs

- .. Stroke
- .. CHD
- .. Renal failure
- .. Pregnancy and newborn problems
- .. Weight gain
- .. Loss of libido
- .. Failure of orgasm or erection
- .. Confusion / sedation
- .. Tremor
- .. Overdose / suicide
- .. Arrhythmias

# Complications of antidepressants and mood stabilizing drugs

And they often don't work !

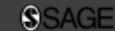
# Psychiatrists reasons for failure !!!

- .. “drug resistant depression”
- .. “Borderline personality disorder”
- .. “Pre morbid pathology”
- .. “Bipolar Disorder”

## Hormone therapy for reproductive depression in women

John Studd

Post Reproductive Health  
2014, Vol. 20(4) 132–137  
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DOI: 10.1177/2053369114557883  
prh.sagepub.com



### Abstract

An email survey of patients attending a PMS and Menopause Centre produced 238 patients whose principal presenting symptom was depression. Seventy-seven percent claimed to have had severe or moderate depression, 17% had had at least one psychotic episode and 14% had attempted suicide. Fifty-eight percent had seen a psychiatrist. Seventy-one percent had received antidepressants and 17% had received mood stabilising drugs. Twelve percent had been admitted to a psychiatric hospital and 3.8% had received electroconvulsive therapy. Sixty-eight percent had premenstrual syndrome as a teenager and 145 women (89%) out of 165 women who had been pregnant had no depression during pregnancy but 110 (66%) developed postnatal depression. Ninety-seven women (58%) who had been pregnant had suffered both premenstrual depression and postnatal depression. All were treated with transdermal estrogens and 93% also had transdermal testosterone. One hundred and seventy-one patients had a uterus and received cyclical progestogen to protect the endometrium and 63% of these developed the premenstrual syndrome-type symptoms of progesterone intolerance during the progestogen days. Thirty-five percent of patients claimed to be cured and 55% had a considerable improvement with estrogen therapy. Only 3.7% reported that there was no improvement. For 94%, the hormone therapy was a life-changing event for the better. None were worse. Forty patients had hysterectomy and bilateral oophorectomy for progesterone intolerance or heavy uterine bleeding and 38 replied that it was life changing for the better with less or no depression. It is concluded that premenstrual and postnatal depressions appear in the same vulnerable women. These women are typically well during pregnancy and are a sub group of reproductive depression which also develops climacteric depression in the transition phase. These types of depression are the product of hormonal changes and respond well to transdermal hormone therapy.

# Email questionnaire of 236 depressed patients

## Past medical history

17% had had a “psychotic episode” in the past

58% had seen a psychiatrist

71% had antidepressants prescribed

17% had mood stabilizing drugs

12% (28) had been an in patient for depression

3.8% (9) had received ECT

14% (34) had attempted suicide

# Email questionnaire of 236 depressed patients

## Therapy

All 238 patients had transdermal estrogens

132 by gel

47 by implant (but always gels first)

59 by both gel and implant

224 (93%) patients also had transdermal  
Testosterone by gel or implant

# Email questionnaire of 236 depressed patients

## Association of PMS and PND

162 of 238 (68%) had pms as teenager

145 of 165 (89%) patients who had been pregnant  
were in good mood without depression during  
pregnancy

but 110 (66%) had postnatal depression

97 (58%) of those pregnant suffered both  
premenstrual and post natal depression and 90  
(92%) of these were well during pregnancy.

# Email questionnaire of 236 depressed patients

## Progestogen intolerance

63% of the 171 patients who took cyclical progestogen had severe PMS symptoms

59 patients had a Mirena IUS inserted

40 (17%) had a hysterectomy- usually a laparoscopic TAHBSO

# Email questionnaire of 236 depressed patients

- .. 40 women had laparoscopic TAHBSO
- .. 38 “life changing for the better” - 2 no reply
- .. 24 no longer on antidepressants
- .. 6 antidepressants but lower dose
- .. 10 never had antidepressants

# Email questionnaire of 236 depressed patients

How did hormone therapy compare with anti-depressants?

- .. 37% Did not have anti-depressants
- .. 61.2% Better
- .. 6.2% The same
- .. 0.4% Worse

# Email questionnaire of depressed patients

Was hormone therapy life changing for you?

Yes for the better 225(94.2%)

No 13(5.8%)

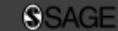
Yes for worse 0

# (Very) long term HRT

- .. Better general health – energy mood libido
- .. Less osteoporosis and fewer osteoporotic fractures
- .. Probably less breast cancer without progestogen
- .. With transdermal therapy fewer heart attacks fewer cardiac deaths and fewer strokes
  - ?? Less AZ ??

For more information

[www.studd.co.uk](http://www.studd.co.uk)



# Hormone therapy for reproductive depression in women

John Studd

## Abstract

An email survey of patients attending a PMS and Menopause Centre produced 238 patients whose principal presenting symptom was depression. Seventy-seven percent claimed to have had severe or moderate depression, 17% had had at least one psychotic episode and 14% had attempted suicide. Fifty-eight percent had seen a psychiatrist. Seventy-one percent had received antidepressants and 17% had received mood stabilising drugs. Twelve percent had been admitted to a psychiatric hospital and 3.8% had received electroconvulsive therapy. Sixty-eight percent had premenstrual syndrome as a teenager and 145 women (89%) out of 165 women who had been pregnant had no depression during pregnancy but 110 (66%) developed postnatal depression. Ninety-seven women (58%) who had been pregnant had suffered both premenstrual depression and postnatal depression. All were treated with transdermal estrogens and 93% also had transdermal testosterone. One hundred and seventy-one patients had a uterus and received cyclical progestogen to protect the endometrium and 63% of these developed the premenstrual syndrome-type symptoms of progesterone intolerance during the progestogen days. Thirty-five percent of patients claimed to be cured and 55% had a considerable improvement with estrogen therapy. Only 3.7% reported that there was no improvement. For 94%, the hormone therapy was a life-changing event for the better. None were worse. Forty patients had hysterectomy and bilateral oophorectomy for progesterone intolerance or heavy uterine bleeding and 38 replied that it was life changing for the better with less or no depression. It is concluded that premenstrual and postnatal depressions appear in the same vulnerable women. These women are typically well during pregnancy and are a sub group of reproductive depression which also develops climacteric depression in the transition phase. These types of depression are the product of hormonal changes and respond well to transdermal hormone therapy.

## Keywords

Hysterectomy, menopausal depression, PMDD, PND, transdermal estrogens

## Introduction

The increased incidence of depression in women is well recognised<sup>1,2</sup> occurring at times of hormonal fluctuations within a woman's reproductive life.<sup>3,4</sup> These episodes of mental illness include premenstrual depres-

and then developed premenstrual symptoms as a teenager. They would have been in good mood during pregnancy only to develop PND. When the cycles and periods return after delivery, the cyclical PMS returns.<sup>5</sup> Perimenopausal mood changes are characteristically at

# Email questionnaire of 236 depressed patients

## Therapy

All 238 patients had transdermal estrogens

132 by gel

47 by implant (but always gels first)

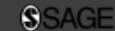
59 by both gel and implant

224 (93%) patients also had transdermal  
Testosterone by gel or implant

## Hormone therapy for reproductive depression in women

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