

Low Dose Naltrexone

Novel uses for a licenced medication

Dr. Phil Boyle,
Dublin, Ireland, May 2014

Disclosure

Doctor Phil Boyle,
MICGP, MRCGP

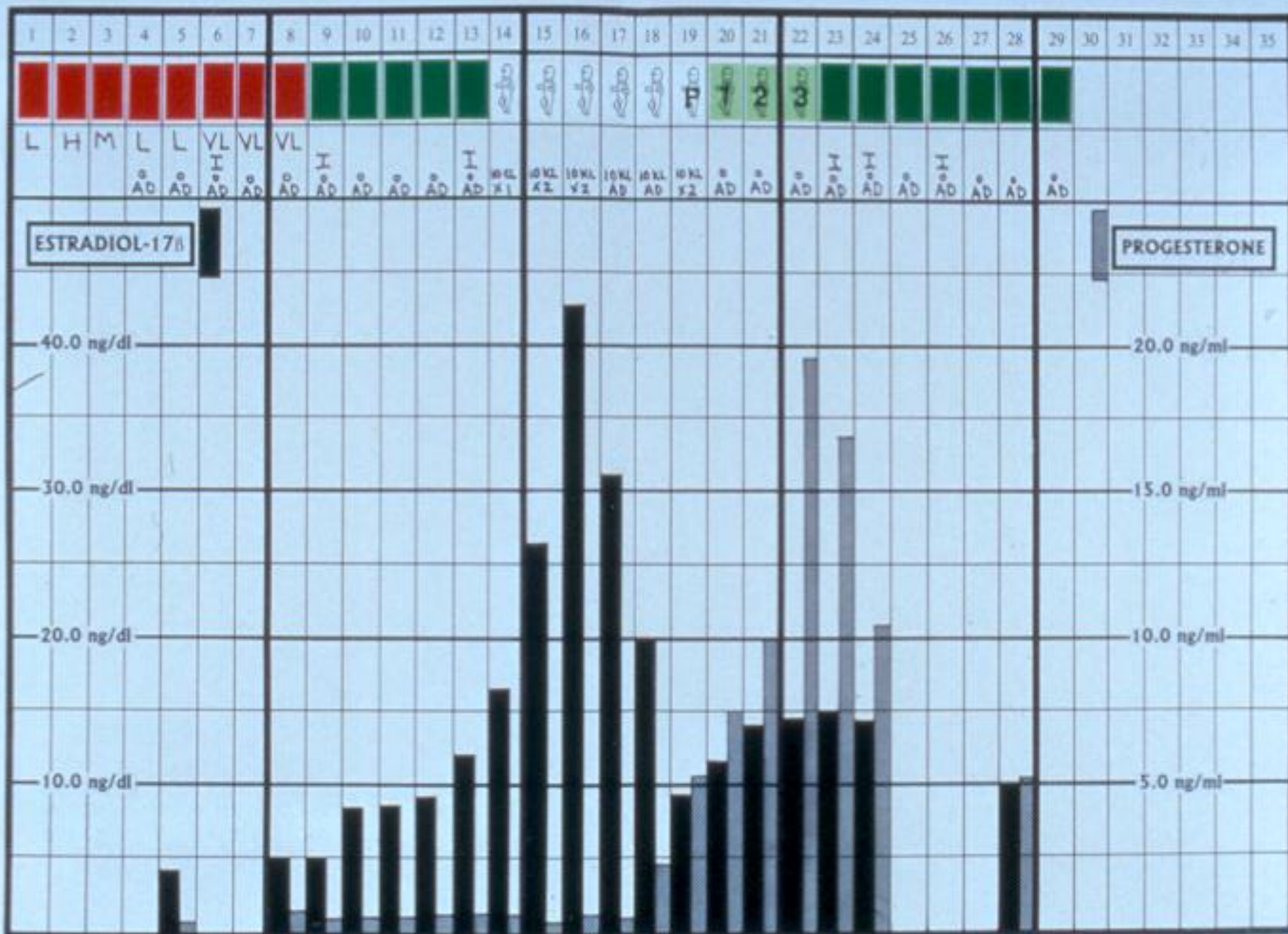
No financial interest or arrangement
that would be considered a conflict of interest.

Qualifications

- Family Physician –General Practice since 1997
- MICGP and MRCGP
 - Focus on Restorative Fertility Treatment since 1998
- Not an expert neurologist, rheumatologist, gastroenterologist
- Not an expert researcher

Qualifications

- I am a clinician – working in clinical practice
- Process of trial and error
- Frequently try new treatments
 - infertility and miscarriage
- I am trained to keep asking questions.....



USE THESE SIGNS: P - PEAK • 1,2,3 - FERTILE DAYS FOLLOWING PEAK • I - INTERCOURSE

CREIGHTON MODEL Method and Use Effectiveness to Avoid Pregnancy—By Center 5-Study Composite and Ordinal Month of Use

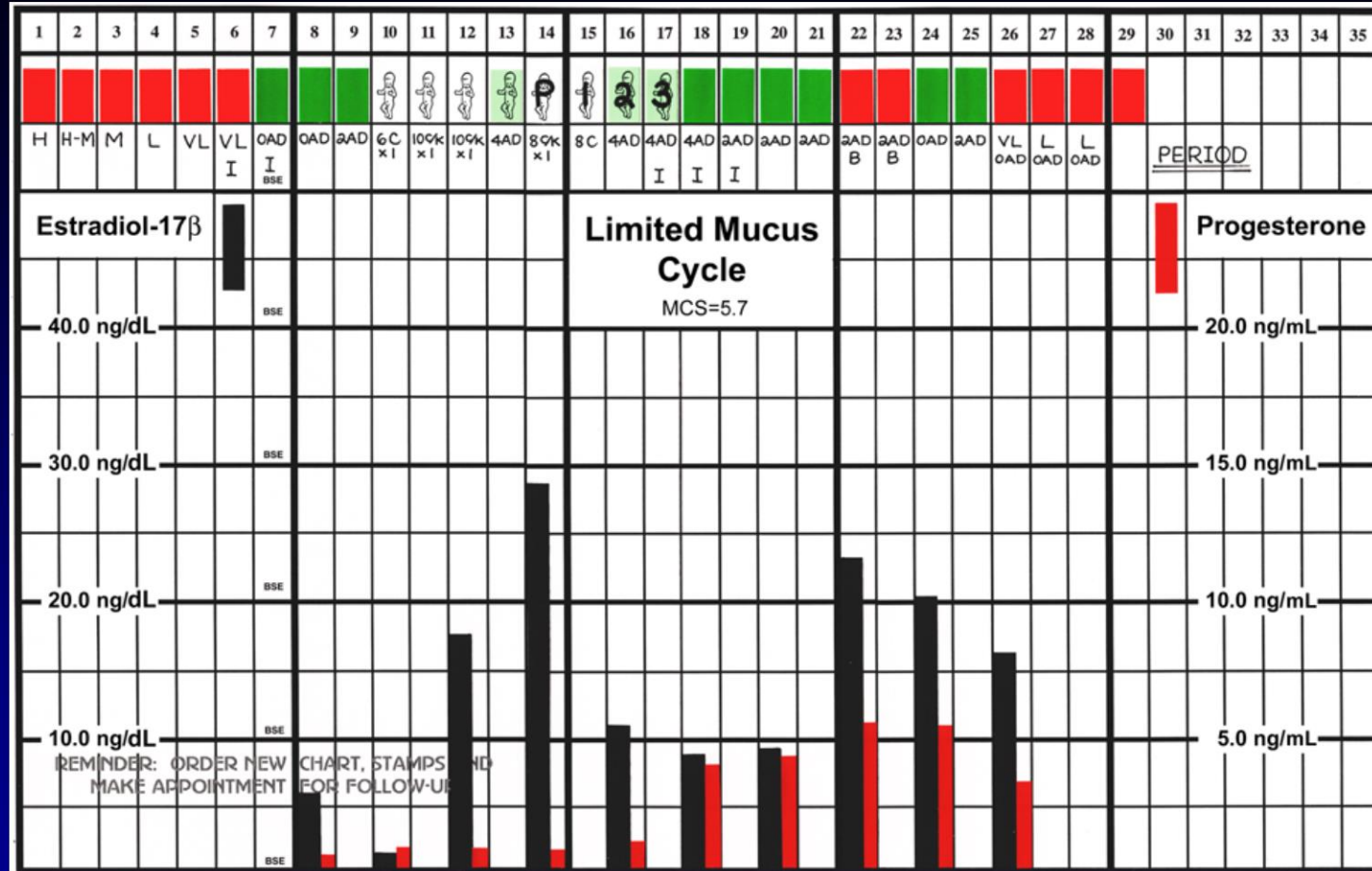
J. Repro Med
June 1998

	Creighton University Omaha	St. John's Mercy Hospital St. Louis	St. Francis University Omaha	St. Joseph Hospital St. Louis	Marquette Nursing Center Omaha	5-Study Composite
1. Through 12 ordinal months 2. Through 18 ordinal months 3. To avoid pregnancy n/a = Not applicable						
Year of study	1980	1980	1985	1989	1994	1995
Number of couples	286	273	378	697	242	1,876
Number of couple-months	2,224.0 ¹	1,980.0 ¹	2,471.0 ¹	7,084.5 ¹	1,819.5 ¹	17,130.0 ¹
Method effectiveness³						
Ordinal month						
1	100.0	100.0	100.0	100.0	100.0	100.0
6	99.6	99.6	99.4	100.0	99.6	99.8
12	99.6	99.6	99.1	99.8	98.7	99.5
18	n/a	n/a	n/a	99.8	n/a	99.5
Use effectiveness³						
Ordinal month						
1	100.0	99.6	99.7	100.0	100.0	99.9
6	95.8	96.4	97.3	98.4	98.7	97.9
12	94.6	95.1	96.2	97.2	97.9	96.8
18	n/a	n/a	n/a	97.1	n/a	96.4

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
█	█	█	█	█	█	█	█	█	█	█	█	█	█	P	1	2	3	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
M	M	M	M	L	VL																																
				AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD		
█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█		
H	H	M	L	VL	VL																																
				AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD		
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				AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	
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H	M	L	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	
				AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD	AD
<p style="text-align: center;">NAPROTRACKING[®] FOR A WOMAN'S HEALTH</p>																																					



**Could the FertilityCare Charts be
telling us something more ?**



A woman with premenstrual spotting, a history of four consecutive miscarriages and a clearly suboptimal luteal phase hormone profile (From: Pope Paul VI Institute research, 2004).



The Fertility *Care* Physician

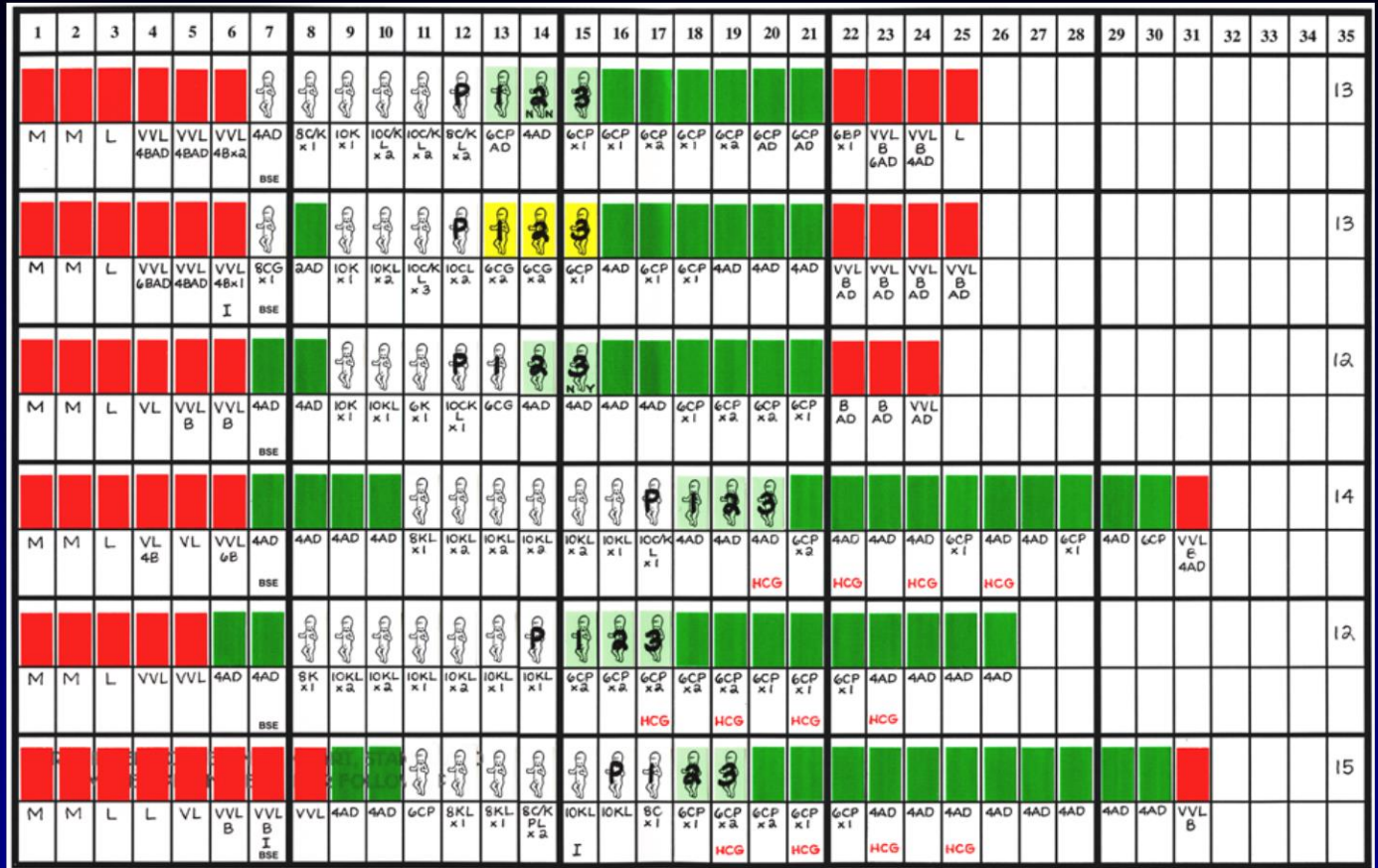
- Can predict which couples are at increased risk of ...
 - Infertility
 - Miscarriage
 - Abnormal pregnancy outcome



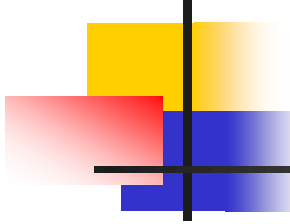
Furthermore.....

The FertilityCare chart can let us know if the treatment plan is effective

....or not!

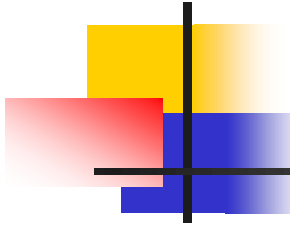


This patient had premenstrual spotting associated with decreased progesterone levels. Following that, she was treated with post-Peak HCG, 2000 units IM on Peak +3, 5, 7 and 9. This is shown in the last three cycles of this figure. This corrected her bleeding abnormality



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35								
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red					
M	H	L	VL 6C x1	VL 8C x1	VL 10SL x2	IOC AD	IOCK AD	IOC x1	IOCK x2	IOCK x2	IOCK x1	IOCK x1	IOCK x1	OAD	OAD	OAD	OAD	IOCY x1	OAD	OAD	OAD	VL 2x2	VL 4x2	OAD	VL 4x2																	
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red				
M	H	L 10SL x3	VL 8C x1	VL 10C x1	VL 10C x2	IOC x1	8C x1	IOC x1	IOC x1	IOCK x1	IOCK x1	IOCK x3	4x2	10WL x1	OAD	OAD	OAD	IOCY x1	OAD	OAD	OAD	OAD	B OAD	B OAD	B OAD	B OAD																
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red				
L OAD	H	L	VL	VL	VL	VL 10C x1	VL 10C x1	IOC x1	IOCK x1	IOCK x2	IOCK x2	IOCK AD	10WL AD	IOC x1	IOCG x1	3W x2	OAD	OAD	4P x2	OAD	OAD	OAD	OAD	VL 8C x2	VL OAD	VL OAD	OAD	OAD	VL OAD													
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red				
L OAD	H	M	L	L	VL	VL 10CKB x2	3W AD	IOCY x1	IOCY x2	8C x1	10SL AD	IOCK x3	IOC x2	6CK x1	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD				
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red				
M	M	L OAD	L OAD	L OAD	L 10CKB x2	IOC x1	IOC x1	IOCK x1	IOCK x2	IOCK x1	IOCK x2	IOCK x1	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD	OAD				
Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red			
VL OAD	H	M	L 6C x2	L 6C x1	VL 10C x1	IOC x1	IOC x2	IOCK AD	STAMPS AND FOLLOW-UP																																	

In this chart, this woman with a longstanding infertility problem was treated with luteal phase support without benefit (first 3 cycles). Then, she was treated empirically with metronidazole 500 mg by mouth two times a day (PO BID) for 10 days and the bleeding stopped (From: Pope Paul VI Institute research, 2004).



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35			
VL	M	M	L	B	OAD	OAD	OAD	OAD	OAD	10C/K x 2	8C x 1	OAD	OAD	8C x 2	10C x 2	10C/K x 1 VL	10C x 2	6C x 1	OAD	OAD	OAD	OAD	OAD	OAD	B OAD	B OAD											
M	M	L	L	VL B	B	6BC	OAD	6C x 1	10C x 1	8C x 1	10C/K x 1	10C/K x 3	10C x 1	8C x 1	OAD	OAD					Enbrel started 25 mg SQ Q84^o																
PMB and TEB with above normal P and E₂ Profile 37y/o G4 P2 SAB2																																					
M	M	M	L	BL	4x1	10C/K x 1	10C/K x 1	10C x 1	10C x 2	10C/K AD	10C/K AD	6C x 2	6C x 1	OAD	OAD	OAD	OAD	4x1	OAD	4x1	OAD	OAD	OAD	OAD													
M	M	L	VL OAD	B	VL OAD	OAD	8C x 1	6C x 1	8C x 2	10C/K x 1	10C/K x 2	10C/K AD	8C x 2	OAD	OAD	OAD	4x1	OAD	OAD	OAD	OAD	OAD	OAD	4x1	OAD	6C x 1											
REMINDER: ORDER NEW CHART, STAMPS AND MAKE APPOINTMENT FOR FOLLOW-UP							Premenstrual spotting and TEB have disappeared																														

This is the same patient as in Figure 32-21. The premenstrual spotting is shown in the first cycle of charting. She was treated by a reproductive immunologist with Enbrel 25 mg SQ every 84 hours. On treatment with Enbrel, her premenstrual spotting and tail-end brown bleeding disappeared

Clinical experience with LDN

- Started to prescribe it in 2004

Low Dose Naltrexone



LDN – plays an important part



Low Dose Naltrexone

Clinical Experience since 2004

- LDN is used to treat Clinical Endorphin Deficiency
- About 50% of fertility patients
- Safe to continue during pregnancy and breastfeeding

Clinical Endorphin Deficiency

1. PMS
2. Polycystic ovaries or Endometriosis
3. TEBB
4. Fatigue 2 or more of these
5. Low Mood
6. Anxiety
7. Sleep
8. Family History of Autoimmunity

Clinical Endorphin Deficiency

- Available from brochure
 - <http://fertilitycare.net/documents/LDNInfoAug13aa.pdf>

Side Effects

1. Vivid Dreams
2. Sleep Disturbance
3. Nausea for about 2 weeks
4. Headache
5. Dry Mouth over 95% acceptable

Drug Interactions

1. Morphine
 2. Codeine
 3. Alcohol
- Safe to combine with steroids
 - Discontinue 2 days before surgery and resume after stopping pain relief

No longer an Experimental Treatment

- It is a licensed drug but at a much higher dose (50mg) for a different indication – drug addiction
- A growing number publications at LDN Website
 - MS, Crohn's and fibromyalgia
- A proven potent immune modifying treatment through a double blinded randomized placebo controlled trial 2011

Low Dose Naltrexone

Dosage

- 3mg nightly
- or
- 4.5mg nightly

Low Dose Naltrexone

- Needs to be specially compounded as
- Fast release preparation
 - Not lactose or calcium carbonate filler
 - Preferably microcrystalline filler (avicel)
- Suppliers listed
 - www.lowdosenaltrexone.org

Infertile 36y female with R.Arth. 2004

- **Diagnosis of PCOD and 10 years of Infertility, previous success in our programme**
- **First episode of Acute onset of R. Arth.**
 - **When trying to conceive for the second time**
- **Diagnosed by Rheumatologist**
- **Resistant to NSAIDS**
- **Advised – Methotrexate (then cannot conceive!)**

Infertile 36y female with R.Arth.

■ LDN

- Rapid 80% improvement in symptoms
- No Side effects
- Conceived after 2 cycles of LDN and other fertility treatment

- Successful pregnancy

Low Dose Naltrexone - LDN

- Surprise!!



- Huge resistance among many doctors to even try it out!

Doctor Resistance

- Unlicensed for Auto-immune disorders
- Experimental treatment
- Not “evidence based” medicine
- Doctors not covered by medical insurance

- Too Risky!



Up the Creek with a Paddle

Beat MS and Many
Autoimmune Disorders with
Low Dose Naltrexone (LDN)

Mary Anne Boyle Bradley

Clinical Experience

1. Case C – 3 previous failed IVF cycles
2. Six recurrent miscarriages

Case C

- Gravida 1 (with IVF), Para 0, 5 Years of primary infertility
- Female age 38, Male age 38
- Mild Endometriosis
- 12 previous cycles of clomid
- 3 attempts at IUI
- 3 previous failed IVF

Case C – NPT Diagnoses

- Endometriosis
- Oligoasthenozoospermia – Male Factor
- **Clinical endorphin deficiency**
- Low progesterone and oestradiol – combined poor follicle function and corpus luteum insufficiency **Obvious from Chart**
- Food Intolerance to eggs

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Green]	[Green]	[Green]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]
Date	1 st	2 nd	3 rd	4 th	5 th	6 th	12 th	13 th	14 th	15 th	16 th	17 th	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th	25 th	26 th	27 th	28 th	29 th	30 th												
SCRIPTION	H	H	M	L	B	B	0 AD BE	0 AD	X2	X2	X1	X2	10 CLK	10L	X3	X1	X2	10	10	10	0 AD	0 AD	0 AD	2	2W	B	VL	VL									
STAMP																																					
Date																																					
SCRIPTION							BE																														
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Green]	[Green]	[Green]	[Green]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	
Date	3 rd	4 th	5 th	6 th	7 th	8 th	10 th	11 th	12 th	13 th	14 th	15 th	16 th	17 th	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th	25 th	26 th	27 th	28 th	29 th	30 th	31 st	1 st	2 nd	3 rd	4 th	5 th	6 th			
SCRIPTION	H	H	M	M	H	L	VL BE	0 AD	0 AD	2	2	10	10	10	6C	8 CLK	10 CLK	10	10	10	0 AD	0 AD	0 AD	2	4	4	2W	VL	VL	VL	VL	VL	VL	VL	VL		
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	[Stick Figure]	
Date	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	14 th	15 th	16 th	17 th	18 th	19 th	20 th	21 st	22 nd	23 rd	24 th	25 th	26 th	27 th	28 th	29 th	30 th	31 st	1 st	2 nd	3 rd	4 th	5 th	6 th			
SCRIPTION	H	H	M	L	B	B	10 BL	2W	10	10	10	6C	8 CLK	10 CLK	10	10	0 AD	0 AD	2	4	10	10	10	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL	VL		
STAMP																																					
Date																																					
SCRIPTION																																					

Pre-menstrual Spotting with low progesterone levels

USE THESE SIGNS: P = PEAK • 1.2.3 = FERTILE DAYS FOLLOWING PEAK • I = INTERCOURSE BE = BREAST SELF-EXAM

Case C – NPT Treatments

- Clinical endorphin deficiency - [significant](#)
 - Naltrexone 4.5mg nightly
- Food Intolerance to eggs
 - Change in diet

Case C – NPT Treatments

- Endometriosis
 - Laparoscopy and diathermy June 2008
- Oligoasthenozoospermia
 - CoEnzyme Q10 200mg daily
 - Tamoxifen 20mg daily
 - FertilityPlus for men
 - Lifestyle – (cigarettes, alcohol, caffeine, stress)

Case C – NPT Treatments

- Low progesterone and oestradiol – combined poor follicle function and corpus luteum insufficiency
 - Clomiphene 150mg daily x 3 days, starting on day 3 of the cycle with HCG 5000 iu mid cycle to facilitate follicle rupture and HCG 2,500 iu on days 3, 5 and 7 after ovulation

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Green]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	10/1	10/2	10/3	10/4	10/5	10/6	10/7	10/8	10/9	10/10	10/11	10/12	10/13	10/14	10/15	10/16	10/17	10/18	10/19	10/20	10/21	10/22	10/23	10/24	10/25	10/26	10/27	10/28	10/29	10/30	10/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X2	X1	X2	X3	X3	X1	X2	X3	X2	X2	X2	X2	X2	X2	X2	X3	X2	AD										
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	11/1	11/2	11/3	11/4	11/5	11/6	11/7	11/8	11/9	11/10	11/11	11/12	11/13	11/14	11/15	11/16	11/17	11/18	11/19	11/20	11/21	11/22	11/23	11/24	11/25	11/26	11/27	11/28	11/29	11/30	11/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X3	X2	X3	X3	X3	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	12/1	12/2	12/3	12/4	12/5	12/6	12/7	12/8	12/9	12/10	12/11	12/12	12/13	12/14	12/15	12/16	12/17	12/18	12/19	12/20	12/21	12/22	12/23	12/24	12/25	12/26	12/27	12/28	12/29	12/30	12/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X3	X2	X3	X3	X3	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	1/1	1/2	1/3	1/4	1/5	1/6	1/7	1/8	1/9	1/10	1/11	1/12	1/13	1/14	1/15	1/16	1/17	1/18	1/19	1/20	1/21	1/22	1/23	1/24	1/25	1/26	1/27	1/28	1/29	1/30	1/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X3	X2	X3	X3	X3	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	2/1	2/2	2/3	2/4	2/5	2/6	2/7	2/8	2/9	2/10	2/11	2/12	2/13	2/14	2/15	2/16	2/17	2/18	2/19	2/20	2/21	2/22	2/23	2/24	2/25	2/26	2/27	2/28	2/29	2/30	2/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X3	X2	X3	X3	X3	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	
STAMP	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]	[Red]
Date	3/1	3/2	3/3	3/4	3/5	3/6	3/7	3/8	3/9	3/10	3/11	3/12	3/13	3/14	3/15	3/16	3/17	3/18	3/19	3/20	3/21	3/22	3/23	3/24	3/25	3/26	3/27	3/28	3/29	3/30	3/31						
SCRIPTION	H	H	M	L	B	B	BE	AD	X2	X3	X2	X3	X3	X3	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	

P. 53
E. 545

P. 41
E. 419

P. 23
E. 432

P. 68.5
E. 435

P. 101
E. 425

MCS = 8+8+6+8+10+6
= 50
= 8.3
PP. = 13
P =
E =

USE THESE SIGNS: P = PEAK • 1.2.3 = FERTILE DAYS FOLLOWING PEAK • I = INTERCOURSE BE = BREAST SELF-EXAM

Case C – NPT Pregnancy Treatments

- Positive pregnancy test in September 2008
- Cyclogest 400mg pv nocte until 14 weeks
- Naltrexone 4.5mg nocte until 38 weeks



Case C – NPT Pregnancy outcome

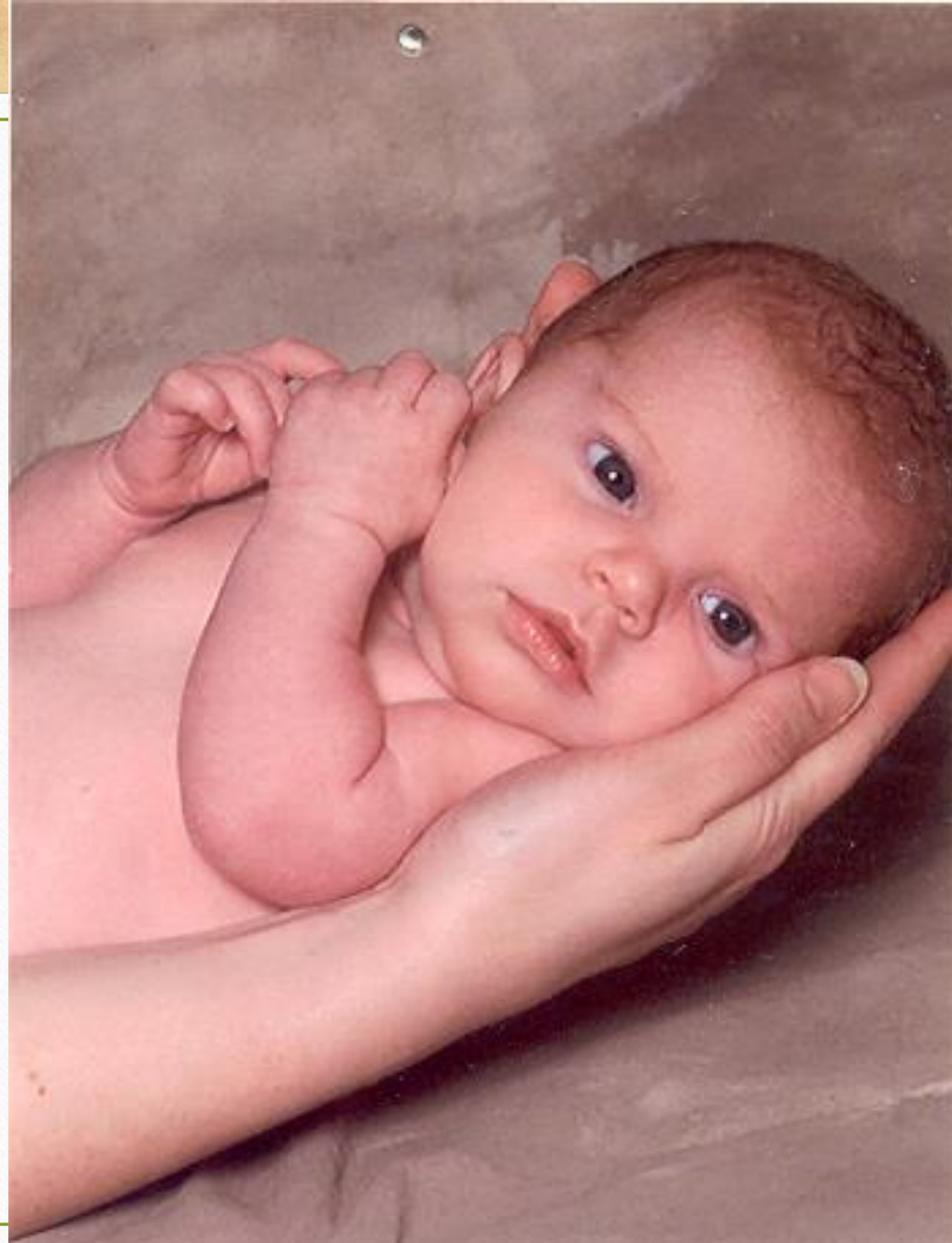
- They had a healthy baby boy by normal vaginal delivery weighing 3.400kg in June 2009, when mum was 40 years old.

Case C – Comments

- We continued Naltrexone throughout pregnancy in this case because the patient felt dramatically better preconception with treatment.
- It appears she had significant endorphin deficiency which needed ongoing treatment
- Over 200 pregnancies with naltrexone

Case C – repeat attempt

- Second attempt in February 2010
- Same treatment approach successfully conceived by September 2010.
- Delivered a second healthy boy at term 19th May 2011
 - Mum 42 years old.



Endometriosis- 27 year old female



Endometriosis 27 yr old single female

- Dx Age 18
 - 5 laparoscopies
 - Oral Contraceptive Pill
 - Zoladex x 3 years – made pain bearable
- Deferred University studies



Endometriosis 27 yr old single female

- Depression
- Profound fatigue
- Underactive thyroid
- Anxiety
- Joint pain
- Severe PMS 7 days each cycle & brown menstrual bleeding

Hospitalised repeatedly for investigation and treatment of pain



Endometriosis 27 yr old single female

- 2007
 - LDN 4.5mg nightly
 - Diet – based on IgG antibody testing



Endometriosis 27 yr old single female

- It has completely changed my life
- For the first time in a long time, I can say I have a life



Endometriosis 27 yr old single female

- Depression - gone
- Profound fatigue - gone
- Underactive thyroid - on a lower dose of medication
- Anxiety - gone
- Joint pain - gone
- Severe PMS 7 days each cycle – now 2 days and mild
- brown menstrual bleeding - gone
- Pain -



Endometriosis 27 yr old single female

- A complete transformation has occurred physically, mentally and emotionally
- For the first time in my life I feel like a complete human being and not a multitude of symptoms
- I was helpless and a hopeless case before this treatment

Bipolar Disorder - 28 year old female

- On Lithium for 10 years
 - Previously hospitalised
 - Trying to conceive and wean off lithium
 - Part of treatment included LDN
-
- Delivered 4 years ago 2010 – Never had a relapse
 - Maintained on LDN

Publications

- PubMed search “[Low Dose Naltrexone](#)” – 83 results May 2014
 - Pain Relief
 - Opioid, Alcohol and smoking cessation
 - Fibromyalgia
 - Crohn’s – Adults and children
 - Systemic Sclerosis
 - Cancer Treatment
 - Multiple sclerosis

Endorphin Stimulation



- Immune modifying effect

- **Local effects** – Reduces pro-inflammatory cytokines

Interleukin (2,6,12), TNF (Tumor Necrosis Factor) alpha, Gamma Interferon

- Cause inflammation from wbc and macrophages

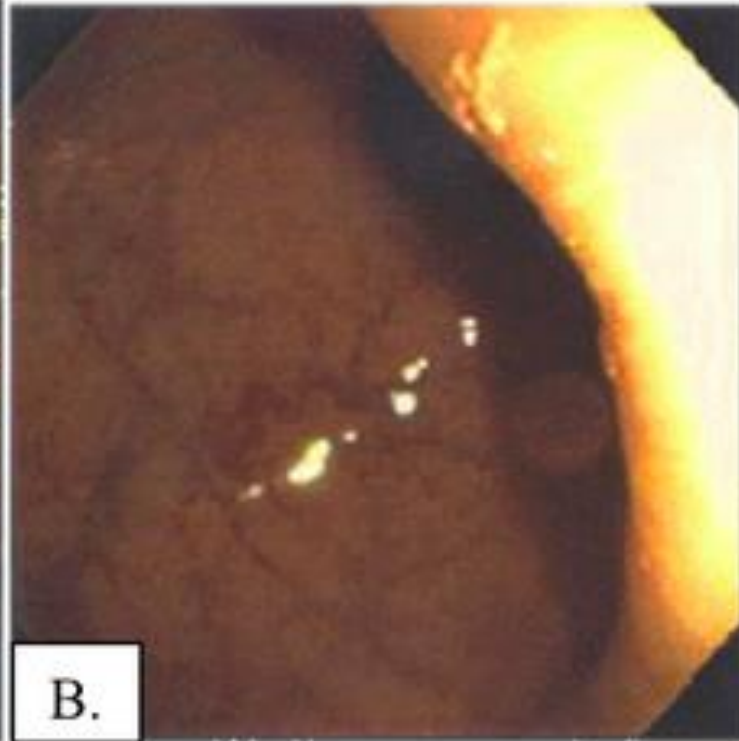
Naltrexone influences mu, kappa and delta receptors locally

Central effect increases endogenous enkephalins (Met-enkephalin) centrally to heal the bowel.

Professor Jill Smith – Am J. Gastro 2007.



A.

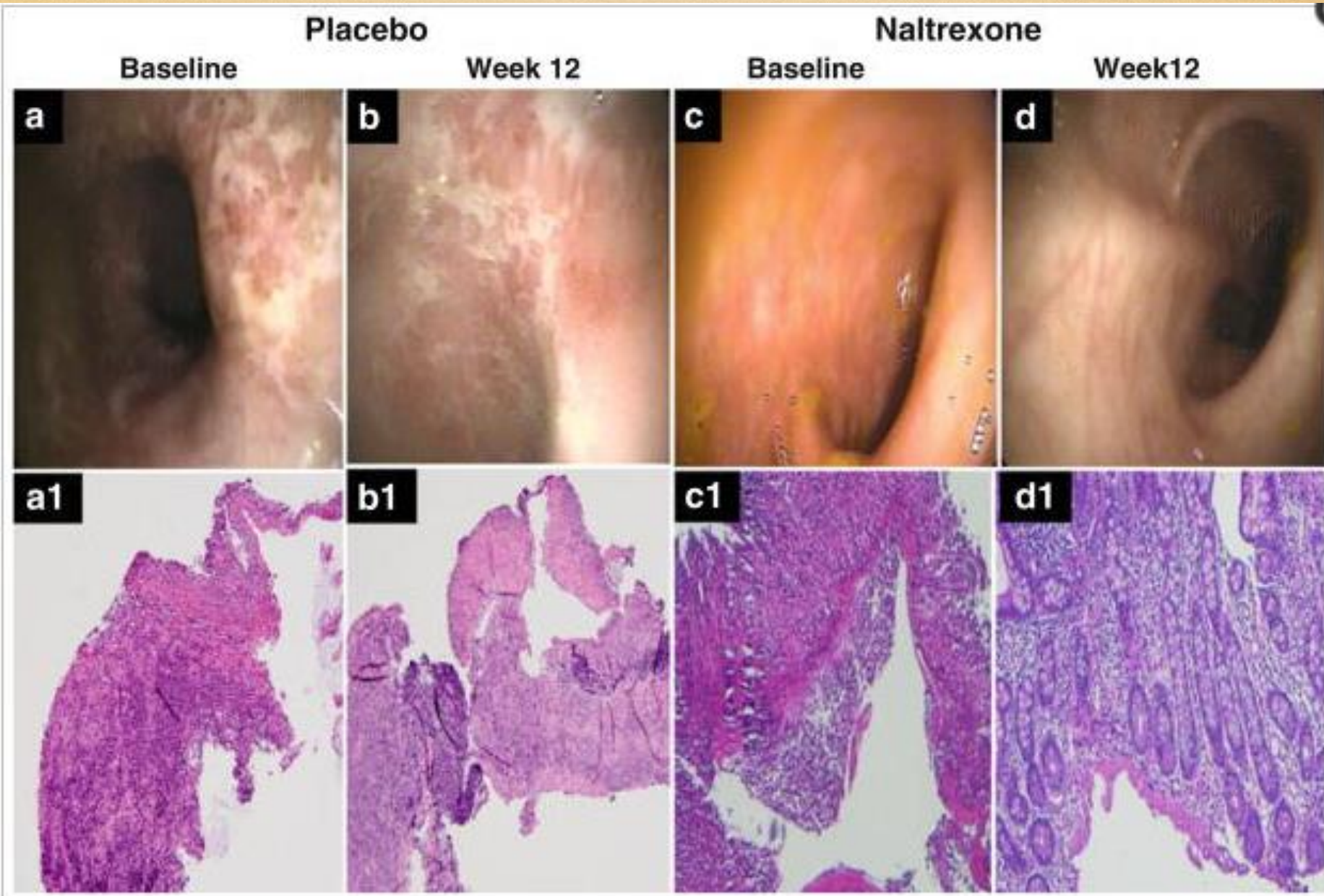


B.

Endoscopic Improvement in Crohn's Colitis with Naltrexone

Figure A: Shown is the rectum of a subject with active Crohn's Disease before starting therapy with naltrexone 4.5 mg/day. The mucosa is ulcerated, edematous, and inflamed.

Figure B: Shows the same area of the rectum in the same patient four weeks after naltrexone therapy. The lining is now healed, ulcers resolved, and the mucosa is healthy.



Naltrexone promotes mucosal healing in active Crohn's disease: 2011

Randomized placebo-controlled trial.

Digestive Diseases and sciences 2011 Impact factor 2012 2.260

American Journal of Gastroenterology - Impact factor 2012 7.553

New England Journal of Medicine - Impact factor 2012 51.658

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3381945/>

Case Presentation

- The Future.....Pre-Treatment!



The Future.....

- 31yo G0 P0 – 1st Visit Feb 2008
- Engaged – wedding July 2008
 - +++PMS, Fatigue,
 - +FH – Sister PCOS
- Not Sexually Active
- Not trying to conceive ...yet!



The Future.....

- Peak +7
 - Low Progesterone
 - Low Oestradiol
- Endorphin Deficiency



The Future.....

- Treatment
 - Cyclogest Peak +3 for 10 nights
 - Naltrexone 4.5mg



The Future.....

- Treatment
 - Improved Progesterone
 - PMS gone
 - Energy and mood improved
- But.....still abnormal bleeding...



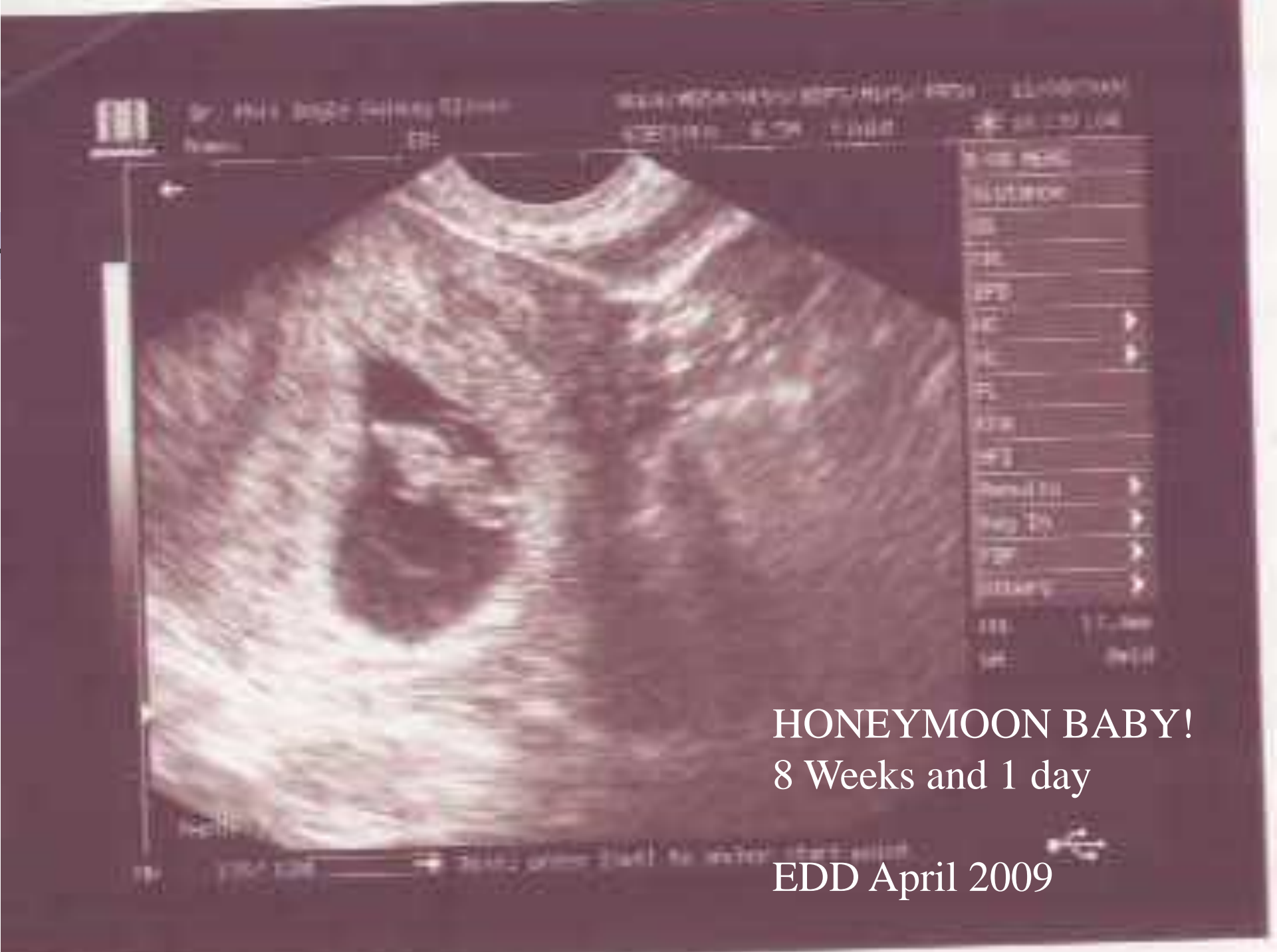
The Future.....

- Ultrasound May 08
 - PCOS
 - Endometrial Polyp
- Surgical referral
 - Hysteroscopy & Polypectomy July 08



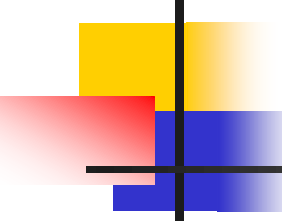
The Future.....

- Healthy and Happy
 - PMS, Energy
- Normal Chart
 - Bleeding, Mucus
- Normal hormones
 - Progesterone, Oestradiol



HONEYMOON BABY!
8 Weeks and 1 day

EDD April 2009





The Future.....

Problem was identified and solved
.....even before it officially existed!

What would have happened
without LDN and
NaProTechnology?



The Future.....for LDN

It is safe....

- Doctors need to consider the mounting clinical and published evidence in favour of LDN!
- Proven Immune modifying treatment Placebo RCT.

LDN



It's not rocket science!