Chronic pelvic pain

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Chronic Pelvic Pain

- Background
- Prevalence
- Aetiology
- Surgical treatment
Chronic pelvic pain

- Annual prevalence of 38/1000

- Major impact on health-related quality of life, work productivity and health care utilisation.

- Constant or intermittent, cyclic or acyclic pain, that persists for 6 months or more and includes dysmenorrhoea, deep dyspareunia and intermenstrual pain (Vercellini et al 1989).
Background

- Laparoscopy commoner than detailed history taking in the UK
- Pain is complex phenomenon affected by several factors
- Knowledge might be helpful in clinical evaluation and management
Clinical Process and knowledge requirements

Prevalence
knowledge about disease burden

Patient presentation
knowledge about aetiology/diagnosis

Testing
• History
• Examination
• Investigations

Diagnosis
knowledge about prognosis

Therapy
• Changes prognosis

Research evidence sought from literature searches

Prevalence Research

Aetiologic and Diagnostic Research

Prognostic Research

Therapy Research

knowledge about therapeutic effectiveness
Clinical outcome

Prevalence

knowledge about disease burden
Systematic Reviews to Support Evidence-based Medicine

How to Review and Apply Findings of Healthcare Research

Khalid S Khan, Regina Kunz, Jos Kleijnen & Gerd Antes

2003 BMA Medical Book Competition

Commended
Basis of medicine

Presented to
Khalid S Khan, Regina Kunz, Jos Kleijnen, Gerd Antes and RSM Press

For
Systematic Reviews to Support Evidence-based Medicine: how to review and apply findings of healthcare research

President
Secretary

BMA
Five steps to conducting a systematic review

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J R Soc Med 2003; 96:118-121

Systematic reviews and meta-analyses are a key element of evidence-based healthcare, yet they remain in some ways mysterious. Why did the authors select certain studies and reject others? What did they do to pool results? How did a bunch of insignificant findings suddenly become significant? This paper, along with a book¹ that goes into more detail, demystifies these and other related intrigues.

A review earns the adjective systematic if it is based on a clearly formulated question, identifies relevant studies, appraises their quality and summarizes the evidence by use of explicit methodology. It is the explicit and systematic approach that distinguishes systematic reviews from traditional reviews and commentaries. Whenever we use the term review in this paper it will mean a systematic review. Reviews should never be done in any other way.

In this paper we provide a step-by-step explanation—there are just five steps—of the methods behind reviewing,
Chronic Pelvic Pain

- Background
- Prevalence
- Aetiology
- Surgical treatment
**Review Question - prevalence**

- **Population:** women at risk
- **Outcomes:** Noncyclical CPP, dysmenorrhoea and dyspareunia
Total citations identified from electronic searches 1226

1001 Citations excluded after screening abstract

Papers retrieved for detailed evaluation: 225

Searching of reference lists: 27

Papers excluded: 109
No/ Insufficient /unclear data 5
Not a primary data source 19
Not on prevalence of pelvic pain 50
Duplicate data 9
Study performed in : pregnant/postnatal women 8
: other disorders 4
: cancer 4
: unrepresentative population 3
Comment/letter/discussion/ case-control study/case report 4
Not on file/unobtainable 3

Primary papers included in systematic review: 143
169 studies:
17 - noncyclical CPP
54 - dyspareunia
98 - dysmenorrhoea
Noncyclical pain (n=17)

Dyspareunia (n=54)

Dysmenorrhoea (n=98)
Quality of prevalence studies

- **Prospective study**: 12 (adequate/yes), 157 (inadequate/no/unclear)
- **Measurement tool validation**: 76 (adequate/yes), 93 (inadequate/no/unclear)
- **Sampling**: 108 (adequate/yes), 51 (inadequate/no/unclear)
- **Sample size estimation**: 17 (adequate/yes), 152 (inadequate/no/unclear)
- **Response rate**: 61 (adequate/yes), 108 (inadequate/no/unclear)

Response rate categories: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
Prevalence of noncyclical pain % (Log scale)

Summary of representative studies
- Representative studies (n=7)
- High quality representative studies (n=2)

All studies (n=17)

13.1% (95% CI 7.7-22.4)  
Heterogeneity p<0.001

6.2% (95% CI 3.0-12.6)  
Heterogeneity p=0.008
Prevalence of dyspareunia % (Log scale)

Summary of representative studies
Representative studies (n=26)
High quality representative studies (n=11)

All studies (n=54)

10.3% (95% CI 7.6-14.0)
Heterogeneity p<0.001

13.3% (95% CI 8.8-20.3)
Heterogeneity p<0.001
Prevalence of dysmenorrhoea % (Log scale)

Summary of representative studies
- Representative studies (n=54)
- High quality representative studies (n=12)

All studies (n=98)

Summary of high quality representative studies

46.7% (95% CI 42.0-51.8) Heterogeneity p<0.001

59.1% (95% CI 49.1-71.0) Heterogeneity p<0.001
Chronic Pelvic Pain

- Background
- Prevalence
- Aetiology
- Surgical treatment
Review Question - aetiology

- **Population:** women at risk
- **Risk factors:**
  - General factors
  - Gynaecological/obstetric factors
  - Psychological and social factors
- **Outcomes:** Noncyclical CPP, dysmenorrhoea and dyspareunia
Total citations identified from electronic searches to capture articles on risk factors in chronic pelvic pain (n= 5326)

Citations excluded after screening titles and/or abstracts (n= 5173)

Articles retrieved for detailed evaluation (n=206)
From electronic search (n=154)
From reference lists (n=52)

Articles excluded (n=94)
Part duplicate data (n=7)
Data not extractable (n=3)
No control group (n=8)
No group without exposure to risk factor (n=9)
Not on pelvic pain (n=13)
Unobtainable (n=7)
No risk factors studied (n=6)
Comment/case report/letter (n=13)
Review articles (n= 28)

Articles included in systematic review (n=112)
Some report on more than one outcome (n=122)

Studies on:
Pelvic pain (n=40)
Dysmenorrhea (n= 63)
Dyspareunia (n= 19)
Quality of aetiology studies

- Prospective study design
  - Adequate: 14
  - Inadequate: 108

- Recruitment of subjects
  - Adequate: 59
  - Inadequate: 63

- Ascertainment of risk factor
  - Adequate: 84
  - Inadequate: 38

- Ascertainment of outcome
  - Adequate: 52
  - Inadequate: 70

- Temporality
  - Adequate: 31
  - Inadequate: 91

- Control for confounding
  - Adequate: 76
  - Inadequate: 46
Risk factor

General /Gynaecological

Age <50 years
Afro-American Race
Grandmultiparity
Ulcerative colitis
Circumcision
Peri/postmenopausal state
Prolapse
Previous PID
Anxiety
Depression
Unsatisfactory relations with partner
Sexual assault
Physical abuse

Dyspareunia
Reduced
Increased

Peto Odds Ratio

0.1 0.2 0.5 1 2 5 10

Effect size-
[99% CI]
<table>
<thead>
<tr>
<th>Risk factor</th>
<th>no. of studies</th>
<th>no. of women</th>
<th>Dyspareunia</th>
<th>Effect size- [99% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt;50 years</td>
<td>4</td>
<td>5524</td>
<td></td>
<td>1.44 [1.14, 1.83]*</td>
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<tr>
<td>Afro-American Race</td>
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<td>580</td>
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<td>1.67 [1.02, 2.72]</td>
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<td>136</td>
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<td>1.18 [0.48, 2.91]</td>
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<tr>
<td>Ulcerative colitis</td>
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<td>78</td>
<td></td>
<td>2.53 [0.70, 9.19]</td>
</tr>
<tr>
<td>Circumcision</td>
<td>2</td>
<td>2078</td>
<td></td>
<td>1.68 [0.98, 2.88]</td>
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<tr>
<td>Peri/postmenopausal state</td>
<td>3</td>
<td>3412</td>
<td></td>
<td>1.52 [1.22, 1.89]</td>
</tr>
<tr>
<td>Prolapse</td>
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<td>62</td>
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<td>0.98 [0.20, 4.84]</td>
</tr>
<tr>
<td>Previous PID</td>
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<td></td>
<td>9.98 [4.69, 21.2]</td>
</tr>
<tr>
<td>Anxiety</td>
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<td>650</td>
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<td>3.23 [1.76, 5.94]</td>
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<tr>
<td>Depression</td>
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<td>7.77 [2.56, 23.6]</td>
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<td>Unsatisfactory relations with partner</td>
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<td>1.43 [0.73, 2.80]</td>
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<td>Sexual assault</td>
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<td>6623</td>
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<td>2.67 [2.16, 3.29]</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>1</td>
<td>90</td>
<td></td>
<td>1.20 [0.32, 4.53]</td>
</tr>
</tbody>
</table>
### Risk factor

<table>
<thead>
<tr>
<th>General</th>
<th>no. of studies</th>
<th>no. of women</th>
<th>Dysmenorrhea</th>
<th>Effect measure</th>
<th>Effect size [99% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt; 30 years</td>
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<td></td>
<td></td>
<td>1.89 [1.36, 2.63]</td>
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<tr>
<td>Height</td>
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<td></td>
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<tr>
<td>Weight</td>
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<td>454</td>
<td></td>
<td></td>
<td>0.11 [-0.10, 0.31]</td>
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<tr>
<td>Low BMI</td>
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<td>14276</td>
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<td>1.42 [1.26, 1.59]</td>
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<tr>
<td>High BMI</td>
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<td>1.07 [0.96, 1.19]</td>
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<td>Marriage</td>
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<td>0.90 [0.82, 1.00]</td>
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<td>Education &lt; 12 years</td>
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<td></td>
<td></td>
<td>1.23 [0.97, 1.56]</td>
</tr>
<tr>
<td>Employment</td>
<td>1</td>
<td>662</td>
<td></td>
<td></td>
<td>1.15 [0.77, 1.73]</td>
</tr>
<tr>
<td>Caucasian race</td>
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<td>6878</td>
<td></td>
<td></td>
<td>1.12 [0.98, 1.27]</td>
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<tr>
<td>Smoking</td>
<td>11</td>
<td>7757</td>
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<td></td>
<td>0.93 [0.48, 1.79]</td>
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<tr>
<td>Passive smoking</td>
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<td>1045</td>
<td></td>
<td></td>
<td>1.37 [1.19, 1.57]</td>
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<td>Alcohol</td>
<td>6</td>
<td>15268</td>
<td></td>
<td></td>
<td>1.44 [0.91, 2.3]</td>
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<td>Occupational exposures</td>
<td>10</td>
<td>13735</td>
<td></td>
<td></td>
<td>0.96 [0.88, 1.05]</td>
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<tr>
<td>Exposure to cold</td>
<td>2</td>
<td>812</td>
<td></td>
<td></td>
<td>0.89 [0.80, 1.00]</td>
</tr>
<tr>
<td>Gynaecological</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral contraception</td>
<td>10</td>
<td>17064</td>
<td></td>
<td></td>
<td>2.12 [1.67, 2.68]</td>
</tr>
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<td>Intrauterine device</td>
<td>3</td>
<td>1935</td>
<td></td>
<td></td>
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<td>Sterilisation</td>
<td>5</td>
<td>3881</td>
<td></td>
<td></td>
<td>0.65 [0.60, 0.71]</td>
</tr>
<tr>
<td>Early Menarche</td>
<td>6</td>
<td>1386</td>
<td></td>
<td></td>
<td>1.13 [0.87, 1.48]</td>
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<tr>
<td>Long menstrual cycle (&gt;31 days)</td>
<td>5</td>
<td>901</td>
<td></td>
<td></td>
<td>1.35 [1.04, 1.75]</td>
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<tr>
<td>Irregular menstrual cycles</td>
<td>2</td>
<td>635</td>
<td></td>
<td></td>
<td>d 0.18 [0.06, 0.29]</td>
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<tr>
<td>Heavy menstrual blood loss</td>
<td>6</td>
<td>1576</td>
<td></td>
<td></td>
<td>d 0.14 [-0.04, 0.32]</td>
</tr>
<tr>
<td>Duration of menstrual flow (&gt;5 days)</td>
<td>6</td>
<td>665</td>
<td></td>
<td></td>
<td>2.02 [1.19, 3.44]</td>
</tr>
<tr>
<td>Abortion/miscarriage</td>
<td>3</td>
<td>504</td>
<td></td>
<td></td>
<td>d 0.42 [0.28, 0.55]</td>
</tr>
<tr>
<td>Nulliparity</td>
<td>6</td>
<td>2758</td>
<td></td>
<td></td>
<td>d 0.61 [0.54, 0.69]</td>
</tr>
<tr>
<td>Involuntary infertility</td>
<td>1</td>
<td>76</td>
<td></td>
<td></td>
<td>1.18 [0.74, 1.87]</td>
</tr>
<tr>
<td>PID in the past</td>
<td>2</td>
<td>1553</td>
<td></td>
<td></td>
<td>1.53 [1.28, 1.82]</td>
</tr>
<tr>
<td>Premenstrual symptoms</td>
<td>6</td>
<td>819</td>
<td></td>
<td></td>
<td>1.51 [0.46, 4.9]</td>
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<tr>
<td>Glutathione S transferase mutation</td>
<td>1</td>
<td>365</td>
<td></td>
<td></td>
<td>1.58 [1.09, 2.3]</td>
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<tr>
<td>CYP2D6 polymorphism</td>
<td>1</td>
<td>357</td>
<td></td>
<td></td>
<td>d 0.44 [0.31, 0.57]</td>
</tr>
<tr>
<td>Psychological</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>3</td>
<td>5365</td>
<td></td>
<td></td>
<td>1.73 [0.76, 3.97]</td>
</tr>
<tr>
<td>Psychological morbidity</td>
<td>6</td>
<td>1342</td>
<td></td>
<td></td>
<td>1.65 [0.78, 3.49]</td>
</tr>
</tbody>
</table>

^d (depression, somatisation, extragression, emotional difficulties, suicidal tendency)
Risk factors for dysmenorrhoea

- Age <30 years
- Low BMI (<19)
- Smoking
- Occupational exposures
- Early menarche (<12 yrs)
- Heavy menstrual blood flow
- Long /irregular menstrual cycles
- PID
- PMS
- Sexual abuse
- Psychological morbidity
Protective factors in dysmenorrhoea

- Oral contraceptives
- Physical exercise
- Marriage/stable relationship
## Risk Factors

### General / Social

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>No. of Studies</th>
<th>No. of Women</th>
<th>Noncyclical CPP</th>
<th>Effect Measure</th>
<th>Effect Size [99% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>1</td>
<td>55</td>
<td></td>
<td>SMD</td>
<td>0.60 [-0.12, 1.31]</td>
</tr>
<tr>
<td>Marriage</td>
<td>6</td>
<td>381</td>
<td></td>
<td>Peto OR</td>
<td>0.63 [0.36, 1.09]</td>
</tr>
<tr>
<td>Employment</td>
<td>4</td>
<td>336</td>
<td></td>
<td>d</td>
<td>0.30 [0.08, 0.52]</td>
</tr>
</tbody>
</table>

### Gynecological / Obstetrical

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>No. of Studies</th>
<th>No. of Women</th>
<th>Noncyclical CPP</th>
<th>Effect Measure</th>
<th>Effect Size [99% CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle length</td>
<td>1</td>
<td>198</td>
<td></td>
<td>SMD</td>
<td>0.08 [-0.29, 0.44]</td>
</tr>
<tr>
<td>Increased duration of menses</td>
<td>1</td>
<td>198</td>
<td></td>
<td>d</td>
<td>0.17 [-0.15, 0.49]</td>
</tr>
<tr>
<td>Multiparity</td>
<td>3</td>
<td>312</td>
<td></td>
<td>Peto OR</td>
<td>1.73 [0.58, 5.10]</td>
</tr>
<tr>
<td>Infertility</td>
<td>1</td>
<td>198</td>
<td></td>
<td>Peto OR</td>
<td>0.10 [-0.26, 0.46]</td>
</tr>
<tr>
<td>Early Menarche</td>
<td>1</td>
<td>202</td>
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<td>SMD</td>
<td>3.00 [1.27, 7.09]</td>
</tr>
<tr>
<td>Spontaneous miscarriage</td>
<td>1</td>
<td>198</td>
<td></td>
<td>Peto OR</td>
<td>0.71 [0.31, 1.63]</td>
</tr>
<tr>
<td>Elective abortion</td>
<td>1</td>
<td>198</td>
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<td>Peto OR</td>
<td>2.45 [1.30, 4.61]*</td>
</tr>
<tr>
<td>Pelvic adhesions</td>
<td>3</td>
<td>538</td>
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<td>Peto OR</td>
<td>1.81 [0.76, 4.28]</td>
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<tr>
<td>Pelvic varices</td>
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<td>436</td>
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<td>3.18 [1.91, 5.30]</td>
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<tr>
<td>Previous caesarean section</td>
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<td>2199</td>
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<td>Peto OR</td>
<td>1.32 [0.84, 2.06]</td>
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<tr>
<td>Sterilisation</td>
<td>2</td>
<td>1026</td>
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<td>2</td>
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<td>d</td>
<td>0.3 [0.07, 0.54]*</td>
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<td>d</td>
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<td>Childhood sexual abuse</td>
<td>10</td>
<td>1642</td>
<td></td>
<td>d</td>
<td>0.46 [0.27, 0.65]</td>
</tr>
<tr>
<td>Childhood physical abuse</td>
<td>5</td>
<td>1048</td>
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<td>d</td>
<td>3.95 [2.77, 5.64]*</td>
</tr>
<tr>
<td>Lifetime sexual abuse</td>
<td>9</td>
<td>1192</td>
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<td>Lifetime physical abuse</td>
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<td>268</td>
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<td>Psychological abuse</td>
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<td>79</td>
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<td>Peto OR</td>
<td>8.47 [4.11, 17.4]*</td>
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<tr>
<td>Any abuse (painfree controls)</td>
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<td>419</td>
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<td>4.61 [1.09, 19.38]</td>
</tr>
<tr>
<td>Lifetime drug abuse</td>
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<td>55</td>
<td></td>
<td>Peto OR</td>
<td>1.83 [0.40, 3.37]</td>
</tr>
<tr>
<td>Lifetime alcohol abuse</td>
<td>1</td>
<td>55</td>
<td></td>
<td>Peto OR</td>
<td>4.03 [1.77, 9.18]</td>
</tr>
<tr>
<td>Painful early memories</td>
<td>3</td>
<td>250</td>
<td></td>
<td>Peto OR</td>
<td>3.86 [1.30, 11.43]</td>
</tr>
<tr>
<td>Disturbed puberty</td>
<td>3</td>
<td>252</td>
<td></td>
<td>Peto OR</td>
<td>2.69 [0.79, 9.19]</td>
</tr>
<tr>
<td>Alcoholisms in one parents</td>
<td>1</td>
<td>142</td>
<td></td>
<td>Peto OR</td>
<td>2.02 [0.40, 10.13]</td>
</tr>
<tr>
<td>Death of one parent before 16 years of age</td>
<td>1</td>
<td>142</td>
<td></td>
<td>Peto OR</td>
<td>3.68 [1.23, 11.08]</td>
</tr>
<tr>
<td>Divorced parents before 16 years of age</td>
<td>1</td>
<td>142</td>
<td></td>
<td>Peto OR</td>
<td>4.01 [1.60, 10.06]</td>
</tr>
<tr>
<td>Unsatisfactory relationship with mother/spouse</td>
<td>3</td>
<td>179</td>
<td></td>
<td>Peto OR</td>
<td>4.01 [1.60, 10.06]</td>
</tr>
</tbody>
</table>
Risk factors for noncyclical pelvic pain

- Noncyclical CPP -
- Pelvic adhesions, previous LSCS, PID, endometriosis
- Abuse
- Psychological morbidity including anxiety, depression and somatisation
## Aetiology - conclusion

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>no. of studies</th>
<th>no. of women</th>
<th>Any CPP</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reduced</td>
<td>Increased</td>
</tr>
<tr>
<td>Pathology</td>
<td>11</td>
<td>4780</td>
<td></td>
<td>0.24</td>
</tr>
<tr>
<td>Abuse</td>
<td>19</td>
<td>9865</td>
<td></td>
<td>0.32</td>
</tr>
<tr>
<td>Psychological morbidity</td>
<td>13</td>
<td>2360</td>
<td></td>
<td>0.51</td>
</tr>
</tbody>
</table>

Effect size $d$
Chronic Pelvic Pain

- Background
- Prevalence
- Aetiology
- Surgical treatment
Pelvic Sensory Pain Pathways

- Ovary
- Ovarian Plexus
- Uterus
- Inferior hypogastric plexus
- Nervi erigentes (C^P and some C^S and U^S)

Lee-Frankenhauser plexuses - sites for LUNA
Indications for LUNA

- Other pelvic pain
- Endo
- Dyspareunia
- Dysmenorrhoea
- CPP

Europe
UK

European LUNA Survey 2002
LUNA: Survey of practice 2002

- Laser: 10%
- Electrodathermy: 59%
- Scissors: 8%
- Harmonic Scalpel: 23%
LUNA: Survey of practice 2002

How Uterosacral Ligaments are Transected
Depth of Transection of USL

OR=0.46 with CI 0.22-0.97
LUNA: Survey of practice 2002

Site at which Uterosacral Ligaments are Transected
Distance of USL transection

OR=3.5 with 95% CI 1.5-8.2

Lee-Frankenhauser plexuses - sites for LUNA
LUNA in endometriosis

![Bar chart showing LUNA severity in the UK and Europe](chart.png)
Treatment of minimal-mild endometriosis

![Bar chart showing the treatment options for minimal-mild endometriosis: Ablation, Excision, Medical Rx in the UK and Europe. The chart indicates the percentage of each method used in the UK and Europe.](chart.png)
Comparison by operator experience

More experienced surgeons:

- Dyspareunia (46% vs. 26%; OR=2.5; 95% CI 1.2-5.4)
- Endometriosis (67 vs. 47%; OR=2.3; 95% CI 1.2-4.7)
- Complete transection (45% vs. 26%; OR=2.3 95% CI 1.1-4.9)
Review Question - therapy

- **Population**: women at risk
- **Interventions**:
  - LUNA
  - PSN
  - Laparoscopy only
- **Outcomes**: Dysmenorrhea
Total citations identified from electronic searches to capture articles on effectiveness of laparoscopic uterosacral nerve ablation (LUNA) (n= 304)

Citations excluded after screening titles and/or abstracts (n=284)

Articles retrieved for detailed evaluation (n=28)
  From electronic search (n=23)
  From reference lists (n=5)

Papers excluded: 19
  No/ Insufficient /unclear data 5
  Not a primary data source 8
  Duplicate data 2
  Comment/letter/discussion/ case-control study/case report 2
  Not on file/unobtainable 2

Studies included in systematic review (n=9)
Quality of trials

- Follow up: 7 Adequate, 2 Inadequate
- Sample size estimation: 5 Adequate, 4 Inadequate
- ITT analysis: 2 Adequate, 7 Inadequate
- Double blinding: 6 Adequate, 3 Inadequate
- Concealment: 3 Adequate, 6 Inadequate
Primary dysmenorrhea

Follow-up 6 months

LUNA vs. control (2 studies, 68 women) 1.43 (0.56, 3.69)
LUNA vs. LPSN (1 study, 68 women) 0.67 (0.17, 2.61)

Follow-up 12 months

LUNA vs. control (2 studies, 68 women) 6.12 (1.78, 21.03)
LUNA vs. LPSN (1 study, 68 women) 0.10 (0.03, 0.32)

Secondary dysmenorrhea

Follow-up 6 months

LUNA vs. control (3 studies, 190 women) 1.03 (0.52, 2.02)
PSN vs. control (1 study, 126 women) 4.52 (1.84, 11.09)

Follow-up 12 months

LUNA vs. control (2 studies, 217 women) 0.77 (0.43, 1.39)
PSN vs. control (2 studies, 197 women) 3.14 (1.59, 6.21)

Follow-up 36 months

LUNA vs. control (1 study, 116 women) 0.84 (0.39, 1.8)

Safety*

PSN vs. Control* 14.57 (5.04, 42.5)
LUNA vs. LPSN* 0.02 (0.01, 0.06)
LUNA Summary

- Variation in practice
  - Variations in use
  - Variations in indications
  - Variations in surgical technique

- Equipoise

  LUNA has been introduced into practice but opinion about its use is not yet solidified

Study protocol

A randomised controlled trial to assess the efficacy of Laparoscopic Uterosacral Nerve Ablation (LUNA) in the treatment of chronic pelvic pain: The trial protocol [ISRCTN41196151]

The LUNA Trial Collaboration*

Address: Department of Obstetrics and Gynaecology, Birmingham Clinical Trials Unit; and Department of Public Health and Epidemiology, University of Birmingham B15 2TT, UK

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Abstract

Background: Chronic pelvic pain is a common condition with a major impact on health-related quality of life, work productivity and health care utilisation. The cause of the pain is not always obvious as no pathology is seen in 40–60% of the cases. In the absence of pathology there is no
Identification of eligible patient
- Chronic pelvic pain >6mth
- Diagnostic laparoscopy planned

During diagnostic laparoscopy
- No obvious pathology
- Technically feasible
- Randomisation

LUNA | NO LUNA
---|---

Follow-up Questionnaire
at 3, 6, 12, 24, 36 months
Chronic Pelvic Pain

- Background
- Prevalence
- Aetiology
- Surgical treatment
“Due to cutbacks and restrictions, we have to do stem cell research with flower stems.”