INCIDENCE OF ANXIETY AND DEPRESSION IN WOMEN UNDERGOING HYSTEROECTOMY

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ABSTRACT
Psychiatric morbidity due to anxiety and depression is high in young women undergoing hysterectomy for oncological reasons both preoperatively and operatively. The decrease in anxiety postoperatively occurred in a gradual way with a shift from severe to moderate and mild degree, but is persistent in 64% of patients 24 weeks postoperatively in the absence of anxiolytics and psychotherapy. Incidence of depression preoperatively was 24% but declined to 14.4% 24 weeks postoperatively without treatment, psychiatric assistance is required after intervention.

Keywords: Anxiety, depression, hysterectomy, anxiolytics.

INTRODUCTION
Hysterectomy is one of the most common gynecological operations done throughout the world (Graesslin et al., 2002). Rate of hysterectomy was 5.6 per 1000 women in 1997 in U.S. (Farquhar and Steiner, 2002). It is a surgical procedure which lowers self esteem and bring about changes in (Qol) quality of life (Jawor et al., 2001). The course of the postoperative period and the return of patients to full health are largely affected by their Psychological state and quality of life they experience, A woman wishes to be cared, have information and support (Wade et al., 2000).

The early diagnosis of the affective disorder and fast application of appropriate treatment can inhibit further symptoms elevation and persistence especially regarding the higher level of anxiety during post hysterectomy period. It is a common concern amongst women that the surgical removal of uterus and ovaries can be a cause of limited physical and sexual activity, rejection by male partner. They will have an effect on their attractiveness and majority of women after hysterectomy can be permanently depressed and can also show symptoms of mixed anxiety and depressive disorder. Review of literature allows for an assumption that anxiety and depression should not be under rated.

Depression can manifest itself in the form of fatigue and this could be experienced by 74% of patients (DeCherney et al., 2002) others complain of pain, depressed mood and anxiety. Majority of retrospective studies have reported an adverse psychological morbidity out come after hysterectomy (Khastiger et al., 2000).

Women undergoing hysterectomy should undergo an examination by psychiatrist and should receive the appropriate treatment, as the efficacy of many anxiolytic drugs has been confirmed, the prototype is benzodiazepines (BDZ) and highly significant responses were seen after their use in many studies, the BDZ receptors are located in high number in the limbic system, midbrain and cerebral cortex, the use of BDZ facilitate neuronal hyperpolarization through GABA receptor Cl channel macromolecular complex. Buspirone is a partial agonist at Serotonin 5HT1A
Incidence of Anxiety and Depression in Women

Table-1
Demographic Details

<table>
<thead>
<tr>
<th>Average Age</th>
<th>Parity</th>
<th>Married</th>
<th>UN Married</th>
<th>Socio Economic Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>38.4 year</td>
<td>5.5</td>
<td>91 (72.8 %)</td>
<td>34 (27.2%)</td>
<td>Poor</td>
</tr>
</tbody>
</table>

Table-2
Age distribution of patients under going hysterectomy

<table>
<thead>
<tr>
<th>S. #</th>
<th>Age</th>
<th>No. of Pts</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20-30 years</td>
<td>28</td>
<td>22.4</td>
</tr>
<tr>
<td>2</td>
<td>31-40 years</td>
<td>58</td>
<td>46.4</td>
</tr>
<tr>
<td>3</td>
<td>41- Above</td>
<td>39</td>
<td>31.2</td>
</tr>
<tr>
<td>Total</td>
<td>125</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Fig. 1. Age distribution of patients.

receptors. It is an addition in the treatment of anxiety with less sedation and dependence. Anti depressants have established beneficial effects in many clinical trials, it was found that some depressed patients recover spontaneously and others require treatment, the effects of drugs are significant in hastening recovery. The drugs act through various mechanisms, the tricyclic antidepressants act by inhibiting nor epinephrine and serotonin transport into
nerve endings and therefore produce sustained facilitation of nor epinephrine and perhaps serotonin function in the brain. Inhibitors of monoamine oxidases in brain increase concentration of many amines but have serious drug and food interactions, whereas recently the safer selective serotonin receptors Inhibitor are dominating the scenario.

So we carried out a study to find out the incidence of anxiety and depression in women undergoing hysterectomy.

**MATERIAL AND METHODS**

The study was carried out at private clinic from 2005–2006 where planned Hysterectomies were performed for non oncological reasons i.e. Dysfunctional uterine bleeding, Fibroids, U/v Prolapse, endometriosis etc.

**Inclusion Criteria**
- Women undergoing planned hysterectomy aged 25-50 years.
- Women belonging to any socio economic status.
- Married or Single
- Literate or Illiterate
- Women having no previous or present history of taking antipsychotics (as they induce depression).

**Exclusion Criteria**
- Women undergoing emergency Hysterectomy.
- Women having malignant lesions leading to Hysterectomy.

### Table-3
Incidence of Anxiety pre operatively

<table>
<thead>
<tr>
<th>S. #</th>
<th>Anxiety</th>
<th>No. of Patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No Anxiety</td>
<td>26</td>
<td>20.8%</td>
</tr>
<tr>
<td>02</td>
<td>Mild: Anxiety</td>
<td>75 (60%)</td>
<td>79.2%</td>
</tr>
<tr>
<td>03</td>
<td>Moderate</td>
<td>23 (18.4%)</td>
<td></td>
</tr>
<tr>
<td>04</td>
<td>Severe Anxiety</td>
<td>01 (0.8%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>125</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Table-4
Incidence of Anxiety Post operatively

<table>
<thead>
<tr>
<th>S. #</th>
<th>Anxiety</th>
<th>2 Weeks</th>
<th>%</th>
<th>8 Weeks</th>
<th>%</th>
<th>12 Weeks</th>
<th>%</th>
<th>24 Weeks</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>No Anxiety</td>
<td>30</td>
<td>24%</td>
<td>31</td>
<td>24.8%</td>
<td>34</td>
<td>27.2%</td>
<td>38</td>
<td>30.4%</td>
</tr>
<tr>
<td>02</td>
<td>Mild: Anxiety</td>
<td>82</td>
<td>65.6%</td>
<td>84</td>
<td>67.2%</td>
<td>82</td>
<td>65.6%</td>
<td>80</td>
<td>64.0%</td>
</tr>
<tr>
<td>03</td>
<td>Moderate</td>
<td>11</td>
<td>8.8%</td>
<td>08</td>
<td>6.4%</td>
<td>07</td>
<td>5.6%</td>
<td>06</td>
<td>4.8%</td>
</tr>
<tr>
<td>04</td>
<td>Severe Anxiety</td>
<td>02</td>
<td>1.6%</td>
<td>02</td>
<td>1.6%</td>
<td>02</td>
<td>1.6%</td>
<td>01</td>
<td>0.8%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>125-100%</td>
<td></td>
<td>125-100%</td>
<td></td>
<td>125-100%</td>
<td></td>
<td>125-100%</td>
<td></td>
</tr>
</tbody>
</table>

### Table-5
Incidence of Depression pre operatively and postoperatively

<table>
<thead>
<tr>
<th>S#</th>
<th>Preoperatively</th>
<th>Postoperatively</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Depression</td>
<td>After 2 weeks</td>
</tr>
<tr>
<td>02</td>
<td>31(24.8%)</td>
<td>28(22.4%)</td>
</tr>
</tbody>
</table>
Incidence of Anxiety and Depression in Women

- Women having multiple systemic diseases.
- Women suffering from Epilepsy and Parkinsonism (as these drugs also induce psychological problems).

A written consent was taken and the HAM-A proforma for Anxiety (Hamilton et al., 1959) and for Depression Zung self-Rating Depression scale (SDS) was filled in two weeks before the operation and then at 4 weeks, 8 weeks and 24 weeks post operatively. The results of preoperative period were compared with that of the post operative period. The Demographic details regarding Age, marital status, parity, socio economic and educational status were also recorded.

RESULTS

Out of 137 planned hysterectomies 125 were included 12 did not turn up for the follow up so they were excluded. The demographic details are shown in Table-1, Mean age of women was 38.4 years. The preoperative findings are shown in Table-3, 20.8% of them had no anxiety preoperatively. 79.2% of the women had anxiety of varying degree i.e. 60% had mild, 18.4 had moderate and 0.8% had severe anxiety.

When the data was collected postoperatively at 2 weeks there was an increase in the number of patients having no anxiety from 20.8 to 24% and also increase in patients exhibiting mild anxiety from 60% to 65.6% and decrease in patients having moderate anxiety from 18.4% to 8.8% slight increase in patients exhibiting severe anxiety from 0.8% to 1.6% was observed post operatively.

After 8 weeks there was increase in number of patients having no anxiety and increase in number of mild anxiety patients from 24% to 24.8% and from 65.6% to 67.2% respectively, there was decrease in patients of moderate anxiety from 8.8% to 6.4% and the patients with severe anxiety remained unchanged (Dennerstein et al., 1994).

At 12 weeks interval patients showing no anxiety was increased from 24.8% to 27.2% and patients having mild and moderate degree of anxiety also decreased from 67.2% to 65.6% and from 6.4% to 5.6% respectively, the number remained constant for patients having severe anxiety i.e. 1.6%.

At 24 weeks there was a further increase in the number of patients having no anxiety from 27.2% to 30.4% and decrease was seen in patients having mild and moderate degree of anxiety from 65.6% to 64% and from 5.6 to 4.8% respectively and the number of patients having severe anxiety decreased to 0.8 as was present at 2 weeks post operative period.

The incidence of Depression preoperatively was 24.8% there was a decrease post operatively to 22.4%, 19.2% and 17.6% at 2, 8 and 12 weeks respectively and 14.4% patients had persistent depression even 24 weeks after hysterectomy.

DISCUSSION

Anxiety and Depression is common preoperatively, women having hysterectomies have higher rates of depression and anxiety preoperatively than the rest of the population (Ryan, 1997). It is not known whether the gynecological symptoms trigger or aggravate pre existing psychological issues or whether the psychological symptom affect the body to cause dysfunctional uterine bleeding, but the incidence in our study was high this could be due to the absence of closest people in decision making, lack of knowledge of surgical operational proceeding and also lack of psychological aid. These factors were also reported in studies carried out in western world (Donoghue et al., 2003) and these all interfere with the rehabilitation and regaining of normal life patterns.

Large number of patients complained of fatigue and this is a highly prevalent symptom having a negative physical, psycho social effect on patients during recovery, it has also been reported that surgical menopause caused
by bilateral oophorectomy along with hysterectomy (Baldaro et al., 2003) could be a cause and simply iron and diet supplement never helped, and the gynecologists did not take the time to explain the issues related to menopause and hysterectomy, this problem was also reported by Galavotti et al (2000).

Patients with pelvic pain preoperatively had a higher incidence of anxiety preoperatively and had great concern about hysterectomy outcome (Hartmann et al., 2004) and patients getting relief of distressing gynecological symptoms showed decreased anxiety. This is the cause for decrease in the number of patients having anxiety of varying degrees.

Age factor also plays a vital role in contribution to psychological problem, in our study 46.4 % were in age group 31-40 years, they exhibited more anxiety and depression as they report of sense of loss and overall disruption in different aspects of lives. The mean age of women under going hysterectomy was 38.4 years whereas a study done by Dennerstein et al reported it to be 40.4 years (Dennerstein et al., 1994).

Incidence of depressed mood is high in women before hysterectomy usually the effect of prolonged heavy periods or chronic pain. Depressed mood may persist with stress of surgery. Depression was seen in 24.8% of the women preoperatively Donoghue et al reported depression in 34% of the cases and these decreased to 3% after 3 months but in our study they decreased to 14.4% this could be due to the lack of psychological support available in our group of patients.and it was reported by Williams et al that 8 % of the women had at least as many symptoms two years later (Williams and Clark, 2000).

Hysterectomized women may exhibit anxiety and depression in the form of body complaints and decreased social well being even 24weeks post operatively (MacDonald et al., 1999).

It was assessed by Kjerulff et al that hysterectomies for benign reason showed that physical, psychological and spiritual domains were important in making the decision for surgery which was viewed as a last resort and a negative cultural and male attitude which pre disposed them to anxiety and depression (Kjerulff et al., 2002).

The response in both anxiety and depression would be adequate, if compliance psychotherapy, appropriate dose and duration of therapy is adopted. Family relationships should be improved and patients should be helped to cope the distressing symptoms (Hamiltion et al., 1959).

CONCLUSION

A thorough psychological examination prior to hysterectomy should be done and a provision of support for the coping process after intervention is required to decrease the persistence of anxiety and depression.

REFERENCES


