Flupenthixol Decanoate (Fluanxol Depot) in the Treatment of Chronic Schizophrenic Patients

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Abstract

Flupenthixol Decanoate was used for the maintenance treatment of 15 chronic schizophrenics. All the patients had been on a variety of neuroleptics before entering the trial. During the trial almost all the patients received injections of 40mg Flupenthixol Depot with interval of 2 weeks. Patients were assessed on Hamilton rating scale for depression, the clinical global impression scale, the brief psychiatric rating scale and a side effect check list. The trial showed Flupenthixol to be an effective anti-psychotic in the treatment of chronic schizophrenics. (JPMA 35: 284, 1985).

Introduction

The need for continued neuroleptic treatment in a majority of chronic schizophrenics has been the subject of various investigations. Since their introduction more than a decade ago, the depot neuroleptics have proved to be very useful in the maintenance of chronic schizophrenics. The main advantages of depot drugs in comparison with oral treatment are good drug compliance with few relapses, rapid switch over to outpatients, and a steady maintenance of serum level. Flupenthixol decanoate, a depot neuroleptic of the thioxanthen group, has been reported to have activating and anti-depressant properties in addition to its antipsychotic effect. Depression is a symptom often seen in schizophrenic patients. The present study was undertaken to investigate the therapeutic properties of flupenthixol decanoate in the maintenance treatment of chronic schizophrenics.

Material and Methods

The trial was carried out for a period of 12 weeks. All the patients were chronic schizophrenics. Their ages ranged between 18 and 65 years, and all had been treated continuously with neuroleptics for at least six months before entering the trial. Excluded from the trial were pregnant patients, patients with co-existing organic brain damage or idiopathic parkinsonism, chronic physical disease, and those who for some other well-defined reason were considered unsuitable by the physician. The drug was available in ampoules of 2 nil, containing 40mg of flupenthixol prepared as decanoate. Both dosage and injection interval were chosen in accordance with the individual needs of the patients. On entry the patient’s relevant information as age, sex, duration of illness, and former treatments were recorded. The Hamilton Rating Scale for depression was completed initially and after 12 weeks of treatment, and the Clinical Global impression scale, and a side effects Check List were completed from 0 to 12 weeks.

In the statistical analysis of the results paired T-Test and the Wilcoxon Matched-Pairs Signed Ranks Test were used to compare the scores of the different ratings with the initial ones. Furthermore, the \( \chi^2 \) Test and Yates’ \( \chi^2 \) were used to analyse the Overall therapeutic effect and frequencies of side effects.

Results

Fifteen chronic schizophrenics entered the study and all completed the trial. There were 11 males and 4
females. Their ages ranged between 21-63 years. The duration of illness and the stay in hospital are shown in Table I.

<table>
<thead>
<tr>
<th>Duration of Illness</th>
<th>&lt;3 mth</th>
<th>3-6 mth</th>
<th>6-12 mth</th>
<th>1-2 yrs</th>
<th>2-3 yrs</th>
<th>3-5 yrs</th>
<th>5-10 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total duration of illness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Duration pres. stay in hospital</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total stay in hospital</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the patients had a duration of illness of more than 2 years, and all had been treated with a variety of neuroleptics before entering the trial. Eight patients received injection fluphenazine decanoate combined with oral neuroleptics, while others received oral therapy. All patients, except one were treated with more than one neuroleptic (mean 2.4 preparations per patient, range 1 -4) for more than two years. Thirteen patients received antiparkinsonian treatment too.

During the trial all the patients received injections of 40mg flupenthixol decanoate with intervals of 2 weeks (average 40mg every 13.8 days).

The additional medication given during the trial period was mainly administered only initially and later reduced considerably. No additional drugs were given from week 6 onwards.

The scores for severity of illness in the clinical global impression were reduced significantly from week 2 onwards (Fig. 1).
The global assessments of therapeutic effect are shown in Table 2.
By the end of the trial, 13 patients (87%) had achieved a marked to moderate improvement in their symptoms. A marked improvement was seen in the global impression of side effects (Table 3).
The ratings at week 0 are due to side effects provoked by the former treatment. It was found that significantly more patients had none or questionable impairment in their functioning at week 12 compared with week 0.

On the Hamilton Depression Scale a significant reduction of total score as well as of mean scores of the six factors was seen.

Table 3 shows the global assessment of side-effects.

<table>
<thead>
<tr>
<th>SIDE-EFFECTS</th>
<th>0 (^{1)})</th>
<th>2</th>
<th>4</th>
<th>12 (^{#})</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Questionable interf. with patients' functioning</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Moderate interf. with patients' functioning</td>
<td>10</td>
<td>10</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Strong interf. with patients' functioning</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^{1)} \text{SIDE-EFFECTS FROM FORMER TREATMENT}

\(^{\#} P < 0.05 \text{ COMPARED WITH WEEK 0}

The ratings at week 0 are due to side effects provoked by the former treatment. It was found that significantly more patients had none or questionable impairment in their functioning at week 12 compared with week 0.

On the Hamilton Depression Scale a significant reduction of total score as well as of mean scores of the six factors was seen.

Table 4 shows the average scores on weeks 0 and 12 for total scores and factors. The residual percentage at week 12 are indicated in the parenthesis.

The six factors form the Hamilton Depression Scale are:
Factor-1 Anxiety/Somatization (Items 10-13 and 15).
Factor-2 Weight (Item 17)
Factor-3 Cognitive Disturbance (Items 2, 3, 9 and 19-21)
Factor-4 Diurnal Variation (Item 19)
Factor-5 Retardation (Items 1, 7, 8 and 14)
Factor-6 Sleep Disturbance (Items 4-6)

Discussion and Conclusion
The finding, that flupenthixol decanoate has an antidepressant effect previously reported 1-3 was confirmed in this study. A statistically significant score reduction on the Hamilton Rating Scale for Depression was obtained on the total score as well as on the six factors that can be constructed from the scale. The three factors, anxiety/somatization, cognitive disturbances, and retardation, have the highest initial scores were reduced to residual percentages of 54, 58 and 67 respectively. Owing to the frequent appearance of depressive symptoms in chronic schizophrenic the anti-depressant effect of flupenthixol decanoate must be regarded as an important property of this drug.

The activating properties previously reported,6 were confirmed in this trial too. These properties make the drug especially useful in apathetic and withdrawn patients, enabling an improvement on social functioning as well as on working ability.

Side effects were less frequent and less severe than those of the previous medications, and the need for additional therapy was also reduced dramatically. Similar observations have been reported by Trueman.7

Owing to the small number of patients and the open design of the present study it would be too much to draw a final conclusion. But it may be concluded that flupenthixol decanoate appears to be an appropriate drug for the treatment of chronic schizophrenics with depression.

Acknowledgement
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References