

Depot antipsychotics

Patient characteristics and prescribing pattern

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ABSTRACT

Objective: To determine the prescribing pattern of depot neuroleptics and the clinical characteristics of patients attending depot clinic.

Methods: A case series of chronic psychotics attending the depot clinic in the day care center at King Abdulaziz University Hospital in Riyadh, over 10 years. Data was obtained from hospital records, patients interview and contact with patients' relatives and social workers.

Results: The total number of patients was 69 (55% were males). The majority were single schizophrenics between

25 and 45 years. Fifty-one percent of patients lost contact with the service. The Chlorpromazine equivalent depot dose was 188.5 mg/day.

Conclusion: Patients clinical characteristics were not significant predictors of use or non-compliance with depot neuroleptics. Losing contact with service was very high. Regular internal audits are required.

Keywords: Psychiatry, chronic psychosis, depot antipsychotics.

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Psychotic disorders are disabling, frequently chronic and relapsing illnesses. The care of such patients places a considerable burden on all carers, from the patient's family through to the health and social services. Neuroleptic agents have been an important element in the treatment of chronic psychotic disorders for almost 4 decades.^{1,2} These agents improve symptoms in schizophrenic patients, facilitate the use of adjunctive non-pharmacologic interventions, and reduce rates of relapse and rehospitalization.³⁻⁵ Antipsychotic medication is of proved value in the immediate and long-term management of schizophrenia.⁶ Whenever drug treatment is discontinued among patients with schizophrenia, within the first 5 years maintenance treatment, about two thirds of the patients have a psychotic relapse^{7,8} though they may continue to function well for the first few months after the drugs are stopped.^{9,10} The prime cause of rehospitalization of schizophrenic patients is non-compliance.¹¹

Injectable depot neuroleptic treatment became the desirable and expedient method of administration and important for compliance of schizophrenic outpatients.¹² Several studies¹³⁻¹⁶ have emphasized the advantages of long acting depot preparations including assuring compliance, and being less time and resource consuming. Also, regular professional contact is ensured and the risk of autointoxication is eliminated. In Saudi Arabia, depot antipsychotic preparations have been in use for decades yet, to the best of the author's knowledge, there has been no published data on their use. Accordingly the present study was carried out at an outpatient psychiatric clinic to determine patients characteristics and the prescribing pattern of depot injections.

Methods. The clinical setting was the depot outpatient clinic in the day care center at King Abdulaziz University Hospital, which is located in

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the center of Riyadh City. It serves a population of about 2 million, and functions as a tertiary center for chronic psychotic patients. The employed design was that of a case series of chronic out-patients receiving long-acting depot neuroleptic injections as part of their total treatment over the interval 1991 - 2000. Data was obtained from hospital records, patients interview, contact with relatives and social workers as appropriate. The data included patients' age, sex, marital status, diagnosis, duration of the illness and type, dose, duration, frequency, compliance with and side effects of depot injections as well as the use of antimuscarinic drugs. Administration of depot medication was confirmed by examination of nurses' records. The deep intramuscular injections were given by psychiatric nurses of the same sex. The data was processed and presented using the Statpac Gold Statistical analysis package.

Results. The total number of patients prescribed depot neuroleptics was 69. Thirty-eight (55%) were males. The male to female ratio was 1.2. The mean age was 34.5 years and the mean duration of illness was 10.5 years. Patients characteristics are shown in Table 1. Age, sex, marital status and diagnosis have not been found significant predictors of using or complying with depot neuroleptics. Of the 69 patients prescribed depot injections only 24 (35%) were still receiving their depot injections regularly in the depot clinic at the time of the study. The reasons include: patients refused injections 7 (10%), lost

Table 1 - Characteristics of patients (n = 69).

	Number	Percentage
Males	38	55
Age (years)		
< 25	12	17
25 - 45	49	71
≥ 45	8	12
Diagnosis		
Schizophrenia*	57	83
Schizoaffective	7	10
Delusional disorders	5	7
Marital status		
Married	15	22
Single	45	65
Divorced/Widowed	9	13

*Two patients had additional diagnosis of mild mental retardation

Table 2 - Psychotropic drug prescribing.

	Number	Percentage
Depot neuroleptics		
Flupenthixol	26	38
Zuclopenthixol	15	22
Fluphenazine	14	20
Haloperidol	14	20
On depot alone	42	61
On depot + oral neuroleptics	27	39
With anticholinergics*	31	50
Mean duration on depot = 7.2 years		
Mean frequency on injections = 3.7 weeks		
Mean Chlorpromazine daily equivalent dose** 188.5 mg		

*Five patients (7%) had no clinical evidence of extrapyramidal side effects
 ** Using the following values: Chlorpromazine 300 mg/day = fortnightly doses of Flupenthixol 40 mg = Zuclopenthixol 200 mg = Fluphenazine 25 mg = Haloperidol 50 mg

contact with the clinic 35 (51%) some of these (7 patients) were transferred by their carers to other hospitals, and the remaining 3 (4%) were changed to new atypical oral antipsychotic agents because of resistant negative symptoms (Clozapine 2 patients and Olanzapine 1 patient). Table 2 shows the psychotropic drug prescribing pattern. Five patients (7%) had been receiving their depot injections for more than 8 years in spite of the fact that they had been clinically stable with no positive psychotic features. One female patient conceived and normally delivered an apparently healthy baby while receiving Zuclopenthixol 200 mg monthly and Procyclidine 5 mg/day. Liver function tests were carried out for 3 patients only following physical complaints, 2 patients had raised liver enzymes that required referral to the physician but no further action was needed. Two patients had insignificant electrocardiogram (ECG) minor abnormalities that required no action. Due to lack of facilities there had been no monitoring of drug plasma level.

Discussion. Depot antipsychotics, though they do not completely guarantee relapse prevention, prevent secondary handicaps of psychosis by suppressing primary symptoms. Several studies suggest that a stable dose of long acting antipsychotics over a very long time is associated with good symptom control and minimal long-term side effects.¹⁷ It should be acknowledged that patients in the present study represent only one center and were under the care of one consultant. Therefore,

one can never be quite sure how representative the subject population is. However, the preliminary data of this study may provide a not insignificant idea of the use of depot neuroleptics in Saudi psychotic patients. The results go with the clinical impression that patients characteristics have generally not been considered predictors of using or complying with depot neuroleptics, in accordance with a previous Western study.¹⁸ Some researchers advocate the use of depot neuroleptics as maintenance treatment for patients with bipolar mood disorders particularly those who experience frequent manic episodes.¹⁹ In the present study no patients with bipolar mood disorder were identified. However, the proof of the efficacy of depot medication in bipolar mood disorder requires a prospective double-blind placebo controlled trial.²⁰ About a third of our patients were on additional oral neuroleptics, which is in line with a relatively recent European study,²¹ compared to 92% in 1970.²² The Chlorpromazine equivalent dose was rather small (188.5 mg/day) compared to product license and Saudi National Formulary,²³ which is roughly equivalent to 300-500 mg/day. Fifty-one percent of our patients lost contact with services which is greater than that found in a prospective follow-up study of 140 schizophrenic patients in a Western study²⁴ (only 5% lost contact). Possible reasons of this high rate of losing contact with services in our patients include: negative family and society attitude towards mental illness, interference with psychiatric treatment by traditional and faith healers, which is a common observation in clinical settings in Saudi Arabia, and lack of community psychiatric nurses. In spite of the fact that they had been clinically stable 7% of patients had been receiving their depot neuroleptics for more than 8 years with no attempts to reduce the dose or increase depot intervals. Studies suggest that patients need to remain on maintenance depot therapy for a minimum of 4 years.²⁵ However, several dose-reduction studies suggest that substantial lowering of fluphenazine decanoate doses for well-stabilized patients is relatively safe with clinical monitoring for signs of relapse and appropriate adjustment doses.²⁶⁻²⁸ Glazer and Kane¹⁴ suggested that the overall efficacy of maintenance neuroleptic therapy should be assessed every 6 months and the clinical reasoning behind decisions to continue, alter, or cease medication should be entered in the patient's chart in the form of succinct notes. Studies of treatment practices have repeatedly drawn attention to apparent overprescribing of anticholinergic agents (50-89% of patients),^{17,29} which in many cases may be withdrawn without an increase in extrapyramidal side-effects.³⁰ Anticholinergic drugs may increase the risks of tardive dyskinesia and may be abused for their euphoriant effects particularly by younger patients.^{31,32} Qureshi^{33,34} has drawn attention to trihexyphenidyl (artane) abuse and dependence

among Saudi psychiatric patients. The study stresses the need for regular internal audits and constant vigilance in supervising the depot injection clinics. This should include a regular review of the patient and the prescriptions offered.

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