

## The National Ethical Guidelines and Research on Bromocriptine

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### Abstract

Bromocriptine reduces growth hormone secretion in Acromegaly. It is also effective in Parkinson disease. It is open labeled study. Single dose administration of 2.5mg Bromocriptine mesylate to patients 3 and 5 healthy volunteers to fasted condition. AUC observed normal.

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### I. Introduction

Bromocriptine reduces growth hormone (GH) secretion in case of acromegaly and thus used. However, in normal person bromocriptine increases the GH secretion. It is well absorbed orally and have longer duration of action than levodopa. Both are highly effective in late cases of Parkinson's disease(PD). The side effects of confusion, nausea, vomiting, hallucination and postural hypotension observed. Bromocriptine is especially preferred for hyperprolactinaemia. It has adjuvant value in treatment of Diabetes Mellitus. It is used alone or dietary control and excersize.

### II. Materials and Methods –Results

Open labeled, balanced and randomized study, done from jan 2018-jun 2018

Following single dose administration of Bromocriptine mesylate 3 candates to 2.5 mg to 5 healthy volunteers to fasted condition. The mean peak plasm levels of Bromocriptine, time to reach peak plasma concentration, elimination half life were  $460\text{pg/ml} \pm 225$ ,  $2.5\text{hrs} \pm 2.1$  and  $4.25$  hrs respectively. Linear relationship was found between single dose of Bromocriptine mesylate and c-max and area under curve (AUC) in the dose range of 1 to 7.5mg.

Following Bromocriptine mesylte 5mg administered twice daily for 14days, the Bromocriptine c-max and AUC at steady state were  $630 \pm 350\text{pg/ml}$  and  $2510 \pm 1200$  pg-hr/ml respectively.

### III. Discussion

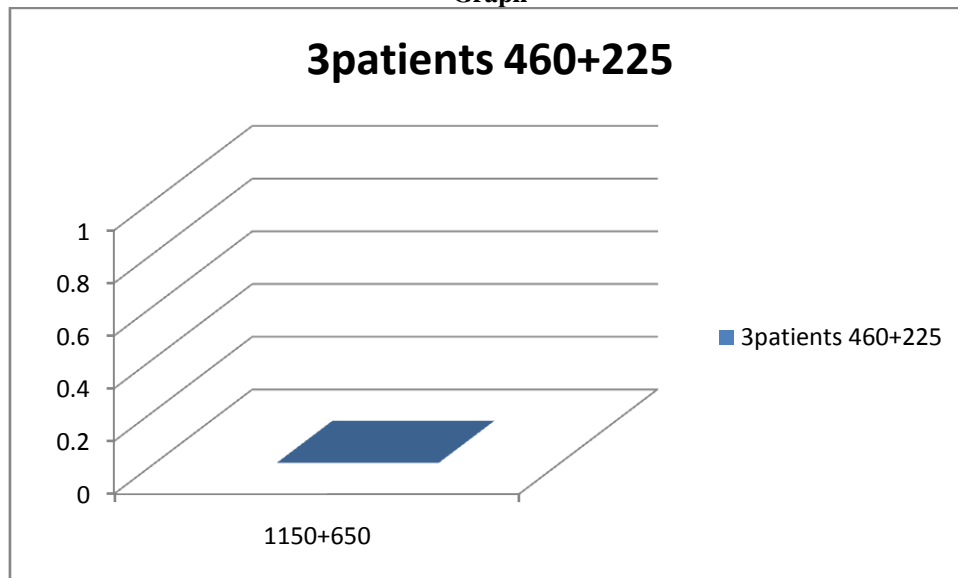
In clinical trials in which Bromocriptine mesylate was administered with concomittent reduction of dose of l-dopa and Carbidopa , the most common effect on-off phenomenon observed. Less common adverse effects like anorexia, nausea, headache and anxiety are observed.

It is indicated in Hyperprolactenemia and Acromegaly and Parkinson disease. Patients unresponsive to l-dopa are poor candidates for Bromocriptine. Bromocriptine is taken with food. The patient should be evaluated frequently during escalation of therapy to determine lowest dose to administer, for therapeutic response.

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Graph



### References

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