Geriforte in the Post-Operative Convalescence of the Aged

Sotantar Rai, M.S., M.A.M.S., Professor of Surgery
Santokh Singh, M.S. Assistant Professor of Surgery,
Gurbax Singh, M.S. Registrar Surgery,
Medical College & SGTB Hospital, Amritsar,
and
Chander Shekhar, M.S., Research Scholar, (At present Registrar, Surgery)
Dayanand Medical College, Ludhiana, India.

There is no illness in other phases of life, which cannot occur in old age, perhaps, in a more or less modified form. And this modification in the panorama of a disease in the aged is attributed to lowered resistance of the body to trauma. Surgery constitutes one such major trauma in old age. The lowered resistance of the aged should not deprive them of surgical management, whenever necessary. Apart from the high operative risk, the fear of protracted post-operative convalescence can prove a great handicap for surgical management of aged patients.

Recognising that fundamental changes in protein metabolism are the primary cause of ageing, many workers try various anabolic hormones. Anabolic have mainly protein sparing activity. Geriforte, an indigenous geriatric tonic (by The Himalaya Drug Co.) is also said to have anabolic activity. The present study investigates the protein sparing activity of Geriforte to improve the post-operative convalescence of the aged when proteins are most needed for tissue repair.

PATIENTS AND METHODS
Eight patients aged 45 and above who underwent surgery in our ward constituted the material for the present study. Out of these twenty patients served as controls.

In addition to general physical examination and systematic examination, subjective and objective assessment was done in every patient according to a common plan. After post-operative assessment, all the cases under trial were put on Geriforte tablets. They continued the treatment for their specific ailments but no hormones, tonic or anabolic was given during the trial period. All the patients were on their usual pre-operative diet.

DOSAGE SCHEDULE
Geriforte tablets were given in the dose of 2 tablets twice daily for the first week and thereafter one tablet thrice daily. The treatment with Geriforte was continued for at least 3 months with reassessment at monthly intervals.

OBSERVATIONS
Out of 60 patients on Geriforte, 12 were females and 48 were males. The average age of the patients was 56 years. In the control group out of 20 patients, 13 were males and 7 females. Average age of the patients was 52 years.

Out of the 60 patients on Geriforte, 10 patients could not be followed up for final assessment.

<table>
<thead>
<tr>
<th>Type of Surgery</th>
<th>No. of cases in Geriforte group</th>
<th>No. of cases in Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostatectomy</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>Laparotomy</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>
Mastectomy | 5 | 3
Cholecystography | 5 | 4
Hernia repair | 7 | —
Miscellaneous | 12 | —
Total | 60 | 20

**SUBJECTIVE BENEFITS**
Out of 50 patients in the Geriforte group that could be followed up, 36 patients (72%) had significant overall improvement whereas 14 patients (28%) could not appreciate any benefit from Geriforte tablets.

The patients who benefited from Geriforte reported an improvement in general feeling of well-being and physical fitness, an appreciable increase in appetite coupled with better digestion and normal bowels. They were relieved from general aches and pains.

**SEX LIFE AND GERIFORTE**
Out of 36 patients who benefited from Geriforte, 6 patients were single and 12 had undergone prostatectomy. The remaining 18 patients (50%) derived improved sexual satisfaction from Geriforte. Out of 20 cases in the control group, there were 12 cases of prostatectomy. There was not much improvement in the sex life in this group.

**WEIGHT GAIN**
In the Geriforte group out of 50 cases followed up, 24 patients (48%) had recorded gain in weight by the time the final assessment was made. The average gain in weight over the pre-operative weight was 7.05 lb. It ranged from 5 lb. to 15 lb. This group included 2 patients who underwent radical surgery for malignancy of breast. Out of 20 cases in the control group, 15 cases did not show any gain in weight by the end of the trial. Average weight gain in the remaining 5 patients were 0.8 lb. only i.e., an overall average weight gain of 0.2 lb.

**TOTAL SERUM PROTEINS**
The estimation of total serum proteins was done by Von Slyke’s method. Sixty eight percent (34/50) patients were found to have appreciable rise in levels of total serum proteins. The average pre-treatment serum proteins in the Geriforte group were found to be 6.7 gm% - whereas it varied from 3.5 gm to 8 gm.

The increase in the serum proteins after administering Geriforte was found to be 0.57 gm% on an average and it ranged from 0.3 to 2.2 gm%. All the patients were on a mixed diet and there was no significant change of dietary pattern during the period of study. In the control group, the pre-operative total serum proteins were 6.9 gm% and the post-operative was 6.8 gm% at the end of the study.

**MISCELLANEOUS**
Repeated examinations did not reveal any effect of the drug on the heart, lung, liver, spleen and prostate gland. There was no change in haemoglobin levels, blood pressure and blood urea estimation after Geriforte treatment.

**SIDE EFFECTS AND TOXICITY**
There were no clinically detectable toxic or side effects and no incidence of drug sensitivity. Various drug combinations showed no incompatibility clinically.
DISCUSSION
Ageing is a biological process, but the constant burden of years produces a biological wear and tear in the body. Various anabolic hormones have been used to halt this wear and tear. Most of these compounds are androgen-anabolic steroids. Studies have shown that androgens reduce the negative nitrogen balance and convert a mildly negative balance to a positive one (Murad and Gilman). They promote a feeling of well-being and improve appetite and their use in terminal diseases cannot be criticised (Murad and Gilman).

Achievement of comparable results in Geriforte certainly signifies its anabolic activity and puts its use in the old people above any criticism. There was overall improvement in 72% of our patients, 65% had improved appetite, 60% had improved general feeling and 50% had definite gains in physical fitness. In 34 patients out of 50(68%) there was significant rise in serum proteins. There was no improvement in any of the 20 control cases.

Geriforte being an indigenous non-hormonal preparation circumvents the various side effects, which are inherent in the use of hormonal anabolic preparations.

The present study establishes beyond doubt that Geriforte as an anabolic assures beneficial effects that can alter the outcome of or shorten the post-operative recovery period and morbidity.

SUMMARY
1. Eighty patients were studied in a controlled trial for the effects of Geriforte in the post-operative period after major surgery.
2. Sixty patients were put on Geriforte out of which 50 could be followed-up thoroughly. The remaining 20 cases served as controls. All the patients were followed up for a period of three months.
3. There was marked improvement in general feeling, physical fitness, increase in appetite, improvement in digestion, restoration of bowel habits to normalcy.
4. Weight gain was from 5 to 15 lb, with an average of 7.05 lb. in Geriforte group and out of 20 control cases, average gain in weight was 0.2 lb.
5. There was overall improvement in 72% patients and definite rise in serum proteins in 68% cases. There was almost no improvement in control cases.
6. There were no toxic or side reactions in any cases of Geriforte.

REFERENCE