*Oxyphenbutazone in Plastic Surgery

Joya Chowdhury, F.R.C.S., F.R.C.S.E.†

The pattern of behaviour of surgical wounds is dependent on various factors. The nature of surgery, amount of tissue damage, degree of blood loss into the tissue spaces, are but a few of the local factors influencing wound repair.

Haematoma formation, presence of inflammatory oedema and bruising due to haemorrhage into tissues, result in slow resolution, delayed repair and pain.

Oxyphenbutazone was introduced by Geigy as a "potent anti-inflammatory anti-exudative agent with analgesic properties". It is an orally effective specific non-hormonal anti-inflammatory agent supplied in enteric coated tablets.

The use of Oxyphenbutazone as an anti-inflammatory and anti-exudative agent in patients undergoing Plastic surgery was studied in a clinical trial using the drug and an identical placebo. This preliminary report is of 100 cases, 50 having the drug and 50 the control.

In order to eliminate as many variables as possible all operations were carried out in sites where the degree of swelling and ecchymosis were clearly visible. Operation thus fell into 3 broad groups :

(i) Facial Surgery.
(ii) Hand Surgery.
(iii) Flaps & Pedicles.

The trial group i. e. those having the drug and the Control group i.e. those having the placebo were further broken down into equal numbers of similar cases.

Cases	Trial Group	Control Group
Acute soft tissue trauma of face	5	5
Maxillary fracture	3	3
Eyelid reconstructions (Cancer)	4	4
Abrasive surgery (acne/smallpox)	6	6
Cosmetic nasoplasty	5	5
Cosmetic blephroplasty	4	4
Cosmetic face lift	5	5
Flaps & pedicles	8	8
Elective hand surgery	10	10

Method of Selection and Documentation

Regular documentation of each case was done in special record charts. The age group selected was above 15 years and below 65 years. Evaluation of cases before inclu-

* Marketed as TANDERIL by Suhrid Geigy Ltd., Dr. Annie Besant Road, P.O. Box 6577, Worli, Bombay-18.

† Calcutta Medical College Hospital & Calcutta Medical Research Institute.

sion in the trial was carefully undertaken to avoid patients having evidence of peptic, hepatic, cardiac or renal diseases.

History taking included history of G. I. cardiac, hepatic & renal disorders both present and past. Taking of antacids, anticoagulants and other drugs and presence of allergy were noted.

A thorough clinical evaluation was undertaken and if clinically significant cardiac, hepatic, peptic or renal disease was detected "special investigations as apprporiate were carried out".

Routine investigations were undertaken in all cases and other investigations relevant to a particular case was done.

Pre-operative treatment detailed operation notes and post operative orders were documented.

General anesthesia was used in all cases. In all rhytidectomies controlled hypotensive anesthesia with Arfronad was used.

Dosage of The Drug.

The initial pre-operative dose was 600 mgm in three divided doses on the day prior to surgery. Post operative dosage was 400 mgm in four divided doses. All doses are given immediately after food.

In cases of elective hand surgery, nasoplasty, rhytidectomy and large flaps the drug was continued for 15 days. In all other cases the drug was given for 5 days.

Drug scheme of all drugs used was recorded upto the 15th post operative day. Antibiotics were given whenever indicated along with Tanderil with no untoward effect.

Evaluation

1. *Post Operative Response* : The results were evaluated clinically with regard to 1) swelling, 2) Ecchymosis, 3) Pain.

The results were graded as follows :—

Clinical Evaluation :

Grade I Minimal or absent swelling
No ecchymosis
No post operative analgesics

Grade II Swelling and/or ecchymosis subsided within 48 hours
One or two doses of post operative analgesics

Grade III Swelling and/or ecchymosis took a week or more to subside completely
Patient required port operative narcotics

The grading of the Trial group was as follows :—

Trial Group 50

Table 2

Cases		*Results*		
Type	No.	Grade I	Grade II	Grade III
Acute soft tissue trauma of face	5	3	2	0
Maxillary fracture	3	0	3	0
Eyelid reconstruction	4	2	2	0
Abrasive surgery	6	1	5	0
Nasoplasty	5	0	5	0
Blepharoplasty	4	1	3	0
Face lift	5	3	2	0
Flaps & pedicles	8	2	4	2
Hand surgery	10	4	5	1

The grading of the Control group was as follows :—

Control Group 50

Table 3

Cases		*Results*		
Type	No.	Grade I	Grade II	Grade III
Acute soft tissue trauma of face	5	2	3	0
Maxillary fracture	3	0	0	3
Eyelid reconstruction	4	0	2	2
Abrasive surgery	6	0	3	3
Nasolplasty	5	0	1	4
Blepharoplasty	4	0	0	4
Face lift	5	0	1	4
Flaps & pedicles	8	2	4	2
Hand surgery	10	2	6	2

When expressed in percentage the grading was :—

Grading of Results

	Grade I	Grade II	Grade III
Total group	32%	62%	6%
Control group	12%	34%	42%

The drug was useful in reducing swelling and ecchymosis and caused marked decrease in post operative pain.

II. *Side Effects* : The drug is generally well tolerated. The side effects which may occur are gastritis nausea, oedema, rash, dermatitis, leucopenia, thrombocytopenia.

In the present series of 50 trial cases, one patient complained of nausea, this was transient and the drug was not discontinued.

Summary :

To summarise, a preliminary report of a controlled trial with Oxyphenbutazone in 100 cases undergoing plastic surgery is presented and the evaluation assessed in three Grades and expressed in figures.

It is felt that this drug has proved useful in alleviating pain and reducing post operative swelling and ecchymosis. The trial is being continued for another year.

REFERENCES

1. Connell, J.F , Jr., and Rousselot, L.M. : Ann. N.Y. Acad. Sci , 68 : 155, 1957.
2. Connell, J.F., Jr., and Rousselot, L.M. : Amer. J. Surg, 97 : 429, 1959.
3. Connell, J.F., Jr., and Rousselot, L.M. : Amer. J. Surg., 98 : 31, 1959.
4. Hipps, C.J. : The Journal of the Michigan State Medical Society, volume 62, Pages 563-567, 1963.