

REMOVAL OF CARCINOMA LARYNX

Mr. A.M.P., 54 years, was admitted for treatment of carcinoma of larynx, with the history of hoarseness of voice, pain in the throat associated with difficulty in swallowing and dyspnoea for the past three months.

One month previous to this admission, he went to Miraj Medical Centre for the treatment. There diagnosis as carcinoma of larynx was made and he was directed to our institution for surgical treatment.

He was habituated to smoke 20 cigarettes a day and addicted to alcohol.

On Physical Examination

A few palpable glands on right side of the neck were present. The patient was very weak and dehydrated. Temp. 97.6°F, pulse 72/m, resp. 18/m; weight 86 lbs., B.P. 80/60, and Hgb. 98%.

For diagnostic purposes, bronchoscopy, oesophagoscopy, and laryngoscopy were done.

An ulcerated growth in the right pyriform fossa, pushing the glottis to the left, was seen.

It did not involve the posterior oesophagus and there was a good lumen.

Biopsy showed squamous cell carcinoma.

After completion of the investigation, it was decided to perform total laryngectomy and radical neck dissection of the right side.

Pre-operative Care

To build up the patient's general condition nourishing fluids like milk, fruit juice, soup, egg etc. by mouth were given, but as the patient was not able to take much by mouth, intravenous 5% glucose and saline 1000 c.c. with Vit. C 500 mgm. were also given daily.

On 14th January, the patient was posted for tracheostomy and

gastrostomy to relieve his breathlessness, and to feed and build up his general condition; the patient refused the operation.

On 26th January, the patient had sudden obstruction of the trachea and was very restless, which necessitated an emergency tracheostomy, and gastrostomy under local anaesthesia.

Following the operation, a gastrostomy tube was connected to the Wangenstein suction to avoid distension.

Tracheal suction was done P.R.N.

Oral feeding was stopped.

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T.P.R. were normal; condition was fair; Temp. 98°F, Pulse 100, Resp. 26; B.P. 100/80; intravenous fluids: 5% glucose 1000 c.c.; 5% glucose saline 500 c.c. with Vit. C 500 mgm.; and B. Complex forte, one vial, Combiotic, one vial, I.M. was also given.

Morphine 1/6 gr. 6-hourly was given.

1st Day:

27th January—condition fair. Temp. 99°F, Pulse 80, Resp. 20.

The above medication and intravenous glucose were given.

2nd Day:

28th January—General condition fair. Temp. 97°F, Pulse 88, Resp. 22. Medications were continued.

Glucose water 1 oz. every ¼ hour through gastrostomy tube started.

Intake 510 c.c., and output 180 c.c.

3rd Day:

29th January—general condition

was much better. Medications continued.

Glucose water 2 oz. every quarter hour plus Bicadex drops 15 m. T. I. D. through gastrostomy tube were given.

Intake 600 c.c., output 550 c.c.

4th Day:

30th January—Glucose water 4 oz. for every ¼ hour. Intake 1440 c.c., output 380 c.c.

I.V. fluid stopped as the intake was increased. Gradually, milk, fruit juice, eggs, soup, *conjee*, and multi-vitamin drops were given. The patient was actually only fit for operation a month after his admission.

On 12th February, patient was posted for right radical neck dissection and total laryngectomy. The usual skin preparation was done.

Sedation

Nembutal 1½ gr. was given at night and repeated at 6.30 a.m.

Bowels evacuated by soap and water enema and repeated in the morning before the operation.

A Ryle's tube was passed as far as it could go, (up to the tumor).

Combiotic one vial I. M. at night and was repeated in the morning before going to Operation Theatre.

Pre-operative

Morphine 1/6 gr. with Atrophine 1/150 gr. was given at 7.45 a.m.

Operation Theatre

Patient was placed in supine position with the neck extended and the head turned to the left side.

Final skin preparation was done. Venesection on the leg was done for transfusion of blood during the operation to replace the blood loss.

Operation was performed under intra-tracheal anaesthesia (General).

Mid-line incision was made at the level of the hyoid bone, a horizontal incision was made extending from the right mastoid process to the left angle of the mandible.

Then, as usual, the radical neck dissection and total laryngectomy were done. Skin flaps were closed with interrupted cotton sutures. Two catheter drains were connected to a suction pump (Steadman's Pump) to drain the oozing and to avoid accumulation.

On the whole, the patient stood the operation quite well. Two units (800 c.c.) of blood was given during the operation. The entire operation procedure took 3 hours and 50 minutes. The patient was returned to the ward in good condition.

Post-operative Care

As soon as the patient returned from the operation room, he was placed in warm bed. T.P.R. and B.P. were checked; Temp. 98°F, pulse 80, Resp. 22, B.P. 108/60. Tracheal aspiration was done whenever needed.

Ryle's tube was connected to the Wangestain suction to suck out the stomach content and to avoid distention.

The Steadman's pump kept at the bed side, was connected to the catheter drains.

Intravenous 5% glucose 1000 c.c. and glucose 500 c.c. with Vit. C 500 mgm. followed after blood transfusion.

Intake and output chart was maintained daily.

T.P.R. and B.P. were checked every 15 minutes for 2 days while the patient's condition was not satisfactory.

The usual nursing care was carried out.

A very careful daily examination was made by the surgeons to note the progress of the patient.

At 3 p.m., patient was very restless and uncooperative; therefore, paraldehyde 2 c.c. was given intra-muscularly.

At 6 p.m., the temperature went up to 102°F, pulse 116, resp. 24, and blood pressure fell to 80/60. Methedrine 1 ampoule I.M. was

given to raise the blood pressure, but with little effect.

At 8 a.m. Temp. 100°F, pulse 100, resp. 20, B.P. 68/40.

Nor-Adrenaline 1 ampoule was added to the intravenous 5% glucose saline 500 c.c. to raise the blood pressure; the drip was adjusted to keep the systolic pressure at about 90 to 100 mm. of mercury.

Oxygen inhalation was started at 9.15 p.m. Temp. 100°F, pulse 104, resp. 18, and B.P. 90/46.

Patient voided urine freely twice in the night.

1st Day :

13th February—Next morning at 9 a.m. the patient's condition was better—Temp. 97°F pulse 84, resp. 20, and B.P. 90/44.

Intravenous glucose saline was discontinued. Gastrostomy feeding 4 oz. of glucose water and milk hourly was started. Oxygen inhalation and Wangestain suction were discontinued.

There was no drainage from the catheter drains. Sponge, back care, mouth care were done. Tracheal aspiration was done whenever needed and the inner tube cleaned, boiled and replaced. Combiotic one vial I.M. given.

At 3 p.m. Temp. was 99°F, pulse 88, resp. 20, and B.P. 72/42. At 9 p.m. Temp. was 101°F, pulse 92, resp. 22, and B.P. 72/42. Patient was made to sit up at intervals for a few minutes.

2nd Day :

14th February—Patient's general condition was fair. Temp. 98°F, pulse 94, resp. 20. Treatment continued and nursing care was carried out.

Gastrostomy feeding; milk, coffee, fruit juice were continued.

Measured intake: 1840 c.c., and output: 750 c.c. Gradually the feeding was increased every day, and eggs, *conjee* etc. were added to the diet.

4th Day :

The Ryle's tube was removed.

7th Day :

The sutures of the neck were removed. The wound healed by first intention.

10th Day :

Sterile water 1 oz. every hour, orally started. Sutures of the laryngectomy wound were removed.

11th Day :

Glucose water, tea, milk etc. 2 oz. every hourly were given.

12th Day :

4 oz. of glucose water, milk, eggs, tea were given hourly.

13th Day :

Conjee, fine rice, mashed potatoes plus the above diet were continued.

16th Day :

The gastrostomy tube was removed as the patient was able to take everything freely by mouth.

On 14th March, the patient was discharged.

He returned to the hospital for check-up on the 1st July and was found to be in good health. Prognosis seemed to be good.

The patient's recovery, on the whole, was due to close supervision and service of skilled and experienced thoracic surgeons; and painstaking good pre-operative and post-operative nursing care was responsible for the eventual recovery of the patient.

Donations to the National Defence Fund

"The Prime Minister has asked me to convey his gratitude to the donors for their gift. The spirit underlying the donations is greatly appreciated."

Sd/- R. K. GOEL

Asst. Private Secretary
to the Prime Minister

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