

A CASE STUDY

Nursing the Patient with Osteogenic Sarcoma

by

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MR. X, 25 year old farmer, was admitted for treatment of a large tumour of the right knee about twice the size of his head. Unable to walk, he was carried to his bed. He complained of:

1. Severe pain in right knee, with loss of use of limb.
2. Weakness
3. Loss of appetite and weight
4. Feeling feverish
5. Constipation.

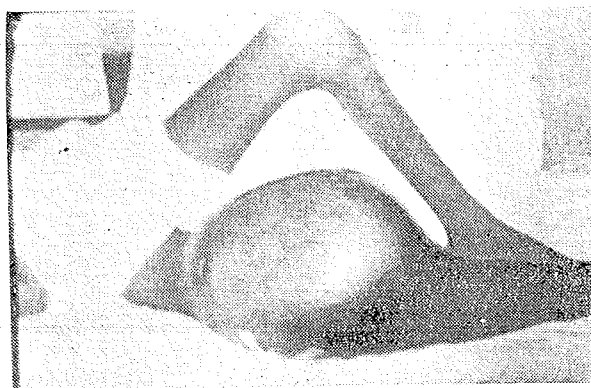
Ten months ago the patient was ploughing and suddenly felt a shooting pain in his right knee. In spite of increasing pain and swelling, he continued his out-door work for six months. After this he remained confined to his bed at home for about four months before seeking medical help.

Admission Findings

Huge tumour extending from right mid-thigh to well below the knee.

Blood pressure 120/80 ; T. 101°, P. 100, R. 24 ; hæmoglobin : 3 grams.

Biopsy confirmed diagnosis of Osteogenic Sarcoma.



After receiving the diagnostic report, it was decided to do a high amputation of the right leg.

Classical Picture

Before following the patient's case any further, let us look briefly at the classical picture of osteogenic sarcoma. This primary bone tumour is most common in young males between the age of 10 to 25 years.

Cause : Trauma is thought to be a contributing factor.

Usual site of tumour : Lower end of femur, upper end of tibia, upper end of humerus.

Signs and symptoms : Pain, tumour-like swelling, weight loss, anæmia, temperature elevation, dilatation of surface veins over tumour, loss of function of limb involved.

Factors in diagnosis : History, physical examination, location of tumour, patient's sex and age, tissue biopsy are the main factors in diagnosis.

Treatment : Amputation of limb.

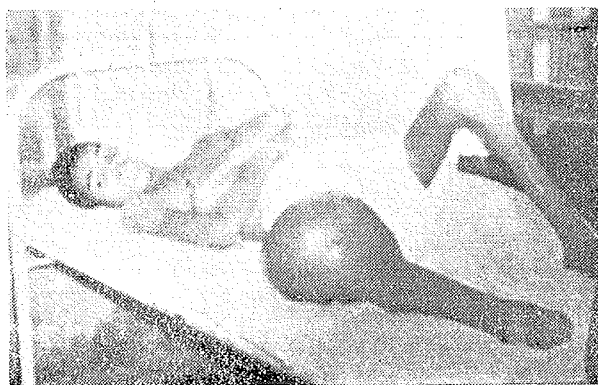
Complications : Metastasis of lung.

Prognosis : Patient usually lives only 1½ to 2 years after diagnosis.

Pre-operative care

During the two weeks before surgery, the patient's general condition was built up with oral iron, extra protein, and a blood transfusion. At first the patient refused surgery because he could not bear to think of living with only one limb. However, after much psychological preparation, he accepted the necessity for amputation.

A sterile bone preparation was done on two successive days preceding surgery ; this included the total area from waist line to foot.



Other pre-operative treatment and medication given.

The patient's condition during the operation was satisfactory.

Additional blood was given during the surgical procedure.

Post-operative Care

The patient was placed in an 'amputation bed' upon return from surgery. A long tourniquet at the head of the bed and a pillow to elevate the 3" stump for the first 24 hours to prevent oedema and bleeding was at hand.

With routine care, the patient responded normally.

Rehabilitation Nursing

The patient himself, as well as doctors and nurses, were members of the team necessary for his successful rehabilitation.

The nurses' responsibility in the team was very great. Perhaps their most important contribution in helping the patient prepare for his discharge was in giving him reassurance and encouragement. Another need was to keep the limb straight. The pillow was removed after 24 hours and Mr. X was encouraged to lie on his abdomen part of each day. After some time, the nurses measured him for

crutches, and then began the work of teaching him to walk. To strengthen his muscles, he was taught how to exercise his limbs. Because of the poor economic condition of Mr. X, a prosthesis was out of the question. There is no social worker in this little hospital and therefore the nurses also had to help the patient face the problem of his future livelihood.

Mr. X talked much to the nurses about his family problems and his future. He was married, but his wife deserted him during the period of his fast growing tumour. He had no children, but he was the only one to support his mother, two brothers, aged 20 and 16, and two sisters aged 18 and 12. His big question was how would they all manage now, for he could not continue active farming as before.

The best solution to the problem seemed to be that Mr. X continue farming, but now only in a supervisory capacity, with his brothers and sisters doing the actual labour. In addition, he could make simple bamboo furniture and contribute his earnings from the sale of these, to the general running of the household. This handwork would also help him to feel satisfied that he was doing something worthwhile.

The patient was discharged two weeks following surgery; prospect of his immediate future being bright.

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LETTER TO EDITOR

Madam,

On reading the note written by K. Krupavaram, Kuwait, in the October issue of the *Nursing Journal of India* (1963), I consider it necessary to clear the following:

Lubricant does not specially mean oil, but a substance used to make insertion of an object easier or to reduce friction. The body has many natural lubricants e.g. tears, mucus, synovial fluid etc. These do not contain any oil. Except for the scalp and skin, nature uses no oil for lubrication.

Krupavaram is perfectly right that liquid paraffin is a light oil, but liquid paraffin is also a substance which is not absorbed by the body. If, therefore, should

any come in contact with a surface, it will not be absorbed. If a little of it trickles down the trachea it may be coughed out as Krupavaram points out. But in weak children and especially premature babies the cough reflex is not effective or developed. Also, the hairs and cilia of the nasal passages may be burdened by the lightest coating of oil. For these reasons oily lubricants are not recommended for use in pediatrics.

Severe complications such as aspiration pneumonia may develop because of possible misuse of oily lubricants. To prevent this danger we do not recommend paraffin as lubricant for passing nasal catheters. We use sterile water or normal saline and teach our nurses to do the same.

Since water or saline is ordinarily used to test the tube *in situ*, we feel it is practical to use this as a lubricant.

We would refer you to "Essentials of Pediatrics" by Jean and Blake, Fifth Edition, Page 231 for a simple set-up for a gavage feeding of a Premature and Infant.

We are happy to present our point of view on this subject, because we realise the idea is new to some nurses. Discussions such as this make us realise that nursing is an interesting art requiring exchange of ideas.

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