

A CASE STUDY ON MANAGEMENT OF TOTAL KNEE REPLACEMENT

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ABSTRACT

This is a case report of an bilateral total knee replacement in a 75 year-old male patient treated orally with Ultracet; Razo; Dib-Z; Ecospirin and Dibimet plus. His past medical history was found to be diabetic since 18 years. Past medication history was observed to be Metformin Hydrochloride + Glipizide. His hematological reports show abnormalities in fasting blood sugar. Fasting blood sugar range initiate to be 157 mg/dl, blood group 'O' Rh type 'Positive', haemoglobin was 53%. Other investigations: X-ray [X-ray of his knee revealed the destruction of joint cartilage]. This is possible provide that fasting blood sugar is closely monitored through out the course of treatment.

KEYWORDS: Bilateral total knee replacement, case report, past medical history, fasting blood sugar.

INTRODUCTION

Pain is an unpleasant sensory and emotional experience that is associated with actual/potential tissue damage. There is no objective measurements of pain.^[1,2]

CLASSIFICATION

1. ACUTE PAIN: Last 30 days occurs after muscle strains and tissue injury, such as trauma or surgery. Increased autonomic nervous system activity frequently accompanies acute pain. Causing tachycardia, tachypnea, hypertension, diaphoresis and mydriasis. Increased anxiety can also occur.^[3]

2. CHRONIC PAIN: It is a feeble or episodic pain of a duration or intensity that negatively affects the function or well being of the patient and can persist after the resolution of an injury. Some describe it as lasting more than 6 months.^[4]

a. CHRONIC NON-MALIGNANT PAIN: It may be a obstacle of acute injury in which the healing process does not occur as anticipated or may be caused by a disease such as a rheumatological disorder (eg: osteoarthritis, rheumatoid arthritis, fibromyalgia).

3. BREAK THROUGH PAIN: Is the intermittent, temporary increased in pain that occurs at a greater intensity over baseline chronic pain. It may be sequential characteristics, precipitating factors and predictability.

4. NEUROPATHIC PAIN: It is an result of an injury or failure of the nervous system. Excluding patients with the progressive peripheral neuropathy or neuropathic pain related to cancer lesions. Tissue injure is not ongoing.

Neuropathic pain is defined as aching, throbbing, burning, shooting, stinging and tenderness or sensitivity of the skin.

5. MIGRAINE PAIN: It is characterized by a severe headache generally allied with nausea and light and sound sensitivity.

RISK FACTORS: Risk factors are caused by the wear and tear of the joints over time. Several factors can cause or increase your risk of developing pain. They include;

1. Age
2. Gender;
3. Intra articular injuries;
4. Obesity;
5. Bone deformities;
6. Environment and lifestyle factors;
7. Other disease conditions(gout, rheumatoid arthritis, Paget's disease and osteoarthritis).^[6]

CASE REPORT

A 75 years old male patient was admitted in the GBR Hospital with the chief complaints of knee pain, swelling and dysfunction of knee. His past medical history was found to be diabetic since 18 years. Past medication history was observed to be Metformin Hydrochloride

+ Glipizide. He had no history of known drug allergies. He was afebrile, His systemic function was normal. His social history was suggestive that he was non smoker and non-alcoholic. Other body functions were normal. His hematological reports show abnormalities in fasting blood sugar. Fasting blood sugar range initiate to be 157 mg/dl, blood group 'O' Rh type 'Positive', haemoglobin was 53%. Other investigations: X-ray [X-ray of his knee revealed the destruction of joint cartilage]. Based on the subjective and objective findings he was diagnosed with bilateral total knee replacement. On day before surgery he was prescribed with Tab. Ultracet-100 mg twice a day, Tab. Razo-40mg once a day. 1 unit blood transfusion was done [decreased hemoglobin]. Patient was fit for surgery. Postoperatively he was started on Inj. Monocef forte-1.5gm IV- BD; Inj. Razo -40mg-IV- OD; Inj. Zofer- 4mg-IV- BD; Inj. Tramadol- 2ml in 100ml normal saline-IV- BD; Inj. Optineuron -2 ml in 100ml normal saline-IV- OD; Inj. Amikacin- 750 mg-IV- OD; IV Fluids 1 liter normal saline and Ringer lactate @75 ml/hr. On the post operative day 13 patient was discharged with the following medication Tab.Razo- 40 mg ×10 days-OD; Tab. Ultracet 100mg ×20 days-BD; Tab. Dib-Z - 10 days-OD; Tab. Ecospirin- 750mg ×10 days; Alovera gel.

DISCUSSION

Total knee replacement require pre operative and post operative treatment. Patient was orally treated with ultracet; razo; dib-Z; ecospirin. Pain assessment plays a main role in total knee replacement patients. Facial pain assessment scale^[9] is use for the pain assessment in the GBR Hospital. The scale used is as follows:

- 10-unable to move-in bed can't move due to pain;
- 9-Severe- barely move because of pain;
- 8-Intense- due to pain talking and listening are difficult;
- 7-Unmanageable- pain is present all the time most of the activities are given up;
- 6-Distressing- giving up many activities;
- 5- Distracting- unable to do some activities;
- 4-Moderate- constantly aware of pain but they can continue most of the activities;
- 3-Uncomfortable- ignoring the pain most of the time;
- 2-Mild- low level of pain;
- 1-Minimal- pain is noticeable;
- 0 - No pain.

CONCLUSION

In this case study the patient was employed to manage total knee replacement. Articular damage along belongs to instability of the involved knee was a source of pain and by controlling unsteadiness subjecting the articular damage of pain were decreased greatly.

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