

Crushed Metronidazole 500 mg tablet in managing chronic non surgical wounds malodor

Ghadeer Al-arja, RN ,Sawsan AL-Ajarmeh, RN,Sewar Salmany, clinical pharmacist, Omar Shamieh, palliative consultant, Abeer Herzallah, Home care nurse, and Hassan Mohareb, Home care nurse, Omar Shamieh, MD, palliative consultant

Background:

Pressure ulcers and fungating tumors, and other chronic wounds are frequently the source of Offensive odors that are distressing source for patients, family, and healthcare professionals. These odors often have a Negative psychological impact on patient and their families And Limit patients' contact with others. The Social embarrassment caused by a malodorous wound increase the misery of advanced and uncontrolled disease, deepening the person's sense of helplessness, worthlessness, and social isolation (Kalinski & Schnepf, 2005)

We as King Hussein cancer center palliative nurses face a high percentage of cancer patient complaining of Offensive odors and distressing exudates resulting from their Pressure ulcers and fungating tumors.

Oral metronidazole has been shown to be effective in alleviating the odor. However it has to be used continuously because of rapid recolonization after treatment is stopped. This can be difficult for patients because of Flagyl GI side effects, leukopenia, neuropathy and the need for abstinence from alcohol. Therefore topical metronidazole was proposed as an alternative. (Yuen, 1997)

Hypothesis:

Topical crushed tablets of metronidazole will decrease malodour associated with non surgical chronic wounds.

Objectives:

The primary objective of the study is to assess the efficacy and safety of metronidazole in eliminating non-surgical wounds odor in cancer patients.

Keywords:

Crushed Metronidazole , Pressure ulcers ,fungating tumors ,malodor.

Materials and Methods

This study will be a single-center, one-arm, and open-label, study with a 5-day treatment period and up to 9 days of follow-up. Recruitment of eligible patients will be carried over one year. All patients meeting the selection criteria and willing to join the study will be enrolled with an

expected minimum of 15 patients maximum 50 patients. Patients have to be 18 years and above with a chronic malodorous nonsurgical wound.

Patient's wound will be treated topically for their odor using powdered Metronidazole tablets, 500 mg in strength. Metronidazole 500 mg crushed tablets will be applied in sufficient quantity to cover the area (one tablet for each 5cm lengthx 5cm width) According to the wound size (maximum 15 cm width x15 cm length) the number of tablets required in each application will be recorded. Assessment of the wound odor and exudates and dressing including application of metronidazol will be done by the same nurse (Sawsan Ajarmeh and Ghadeer Al-arja each will follow her patient till the end of the study) also the patient (or direct care giver) will do the Assessment of the wound odor before treatment on day 1 and after treatment at days 2, 3, 4, 5 and 8 The treatment with Metronidazole will be done once daily for five consecutive days (Day 1 – 5) Patients will be monitored for signs of allergy (daily evaluation form for any signs of allergy (redness, itching, rash) during his participation on the study from day 1-5 and day 8) and any other adverse event form for the duration of treatment and day 9 after the end of treatment (by telephone call that will be done by research team).

If allergy occurred Metronidazole will be stopped and Dr Omar Shamieh will treat the patient allergy according to its severity and KHCC standard medical care.

- ❖ This is study that we started as a palliative team months ago we contributed as:
 - Primary investigator (my self)
 - Co investigators (3 palliative nurses, one pharmacist and one palliative doctor)

We prepare all paper work and took IRB (Institutional review board) approval.

Waiting for JFDA (Jordan Food and Drug Administration) approval.

We face a lot of problems regarding the time to collect data and doing our job at the same time, in other hand the grant is a big issue epically that we need JFDA fees and approval, sometimes we feel down cause we didn't have enough support from our leaders in comparison to the support given to doctors when they wish to start a study, That makes the nurses more hesitant to contribute in any study because they see no benefit in contributing in such studies especially when there is no appreciation for their effort.

So I think time, appreciation, financial support and research workshops (for nurses at their work and at college before graduation) is very important in supporting nursing research in addition to presenting the studies on their facility as grand rounds and open days may help in spreading nursing research culture and of course translating the result of the clinical research as stander of care and changing polices accordingly followed by nursing training is important also.