

# [Pharmacology: a case study in polypharmacy assignment](https://assignbuster.com/pharmacology-a-case-study-in-polypharmacy-assignment/)

Introduction In analyzing the case study of Mrs. A, a number of factors come into play. The patient has recently been exhibiting unusual symptoms including confusion, fatigue, irritability and apparent obsessive/compulsive behavior. Her daughter fears the onset of a demitting Illness. However, upon close examination of Mrs. As prescribed medications, very deferent conclusions can be drawn. Overview of each Mrs. As medical conditions The Online Medical Dictionary at www. Middy. Com. AU defines CUFF as a condition where nerve Is Intellective pumping AT ten near leaning to Toll retention Ana organ congestion.

The site defines osteoarthritis as “ Inflammatory degenerative Joint disease occurring chiefly in older persons. ” There are various drug treatments available for these conditions. Polychromatic and Mrs. As problematic pharmacological management A close examination of Mrs. As drugs, serves to reveal the problematic nature of her pharmacological management and the results of polychromatic. Perfumeries 40 MGM daily in the morning Loeb, S (2001: 649) includes the following factors in his outline of perfumeries. Indications & dosage: Hypertension – adults 40 MGM P. O. B. I. D.

Adjust dose according to response. Adverse reactions: Hypoglycemia (low potassium), fluid and electrolyte imbalances. Relevant interactions: Care should be exercised in patients receiving potassium depleting agents. Nursing considerations: Monitor serum potassium level. Watch for signs of hypoglycemia (for example fatigue, muscle weakness and cramps). Give P. O. And I. M. Preparations in a. M. To prevent nocturnal. Applications to case study It is likely that perfumeries is being given to Mrs. A as diuretic therapy to treat fluid attention typically associated with Congestive Cardiac Failure.

Mrs. As dose of 40 MGM daily in the morning is a standard initial dose however it should be adjusted according to response. Morning dose is correctly implemented to alleviate sleeplessness and reduce gastric disturbance. Perfumeries could be increasing Mrs. As sensitivity to dioxin. As such, an alternate drug such as Contact may be advisable. Moreover, a high potassium diet may help reduce potassium loss and the risk of hypoglycemia whilst eliminating the need for potassium supplements. Mrs. A needs to be monitored for symptoms of hypoglycemia ND her serum potassium levels checked.

Dioxin 250 micrograms daily Mockery, L & Saleroom, E (1989: 454-458) includes the following factors in their outline of dioxin. Inhalations & dosage: In elderly patients, an Minimal goose AT to /u micrograms may be given as a single dose. Maintenance dose for adults over 65 years is 125 micrograms P. O. Daily and for frail or underweight elderly patients this may be only 63 micrograms daily or 125 micrograms every other day. Adverse reactions: Fatigue, muscle weakness, agitation, yellow-green visual disturbance, gastric irritation, arrhythmias.

Relevant interactions: Diuretics – hypoglycemia, predisposing patient to digitalis toxicity. Antacids – decreased absorption of oral dioxin. Nursing considerations: Obtain baseline data (heart rate and rhythm, blood pressure, and electrolytes) before giving first dose. Dose is adjusted to patient’s clinical condition and is monitored by serum levels of cardiac glycoside, calcium, potassium, magnesium, and by EGG. Check for symptoms of toxicity. Dioxin is being used to treat Mrs. As CUFF. The dose of 250 micrograms daily far exceeds the regular maintenance dose for a patient of her age.

It is thus almost certain that Mrs. A is suffering from dioxin toxicity which is most likely being compounded by taking perfumeries. Mrs. As symptoms of confusion, fatigue, irritability and visual disturbance are symptomatic of dioxin poisoning. Implant (also being taken by the patient) can suppress the effectiveness of dioxin however in this case the dioxin dose is so high that Implant would be having a minimal impact. Mrs. As dioxin dose must be adjusted to her clinical condition and her serum levels monitored. Dioxin should be taken with meals to decrease the effects of gastric irritation that can accompany treatment.

Perfumeries and dioxin can both cause hypoglycemia; this can be controlled by encouraging Mrs. A to eat potassium-rich foods, instructing her about dosage regimen, reportable signs of digitalis toxicity, and follow up plans. Perpetrator 500 MGM, 1-2 tablets 4-hourly PRNG Loeb, S et al (1994: 813-815) includes the following factors in their outline of perpetrator. Indications & dosage: Adults and children over 1 1 years – 325 MGM to 650 MGM P. O. Q 4 hours; or 1 g P. O. Q. I. D. P. R. N. Maximum dosage should not exceed 4 g daily. Dosage or long term therapy should not exceed 2. 6 g daily.

Adverse reactions: severe liver damage with toxic doses, rash. Relevant interactions: None. Nursing concentrations: Has no gallants anta-lampoonery erect warn patient Tanat high doses can cause hepatic damage. It is possible that perpetrator is being given to Mrs. A to treat the pain associated with her osteoarthritis, or for headache which may be a side effect of proximal administration. The dose being taken is relatively high. Perpetrator does not react adversely with the other drugs being taken by Mrs. A, however her dose must be monitored and adjusted according to need.

The nurse needs to assess why Mrs. A is taking perpetrator and whether it is beneficial. Proximal 20 MGM at night Broody, T et al (1994: 397) includes the following factors in his outline of proximal. Indications & dosage: 20 MGM P. O. Once daily. If desired, the dose may be divided. Adverse reactions: Headache, drowsiness, nausea, epigenetic distress, peptic ulceration, nonprescription. Nursing considerations: Use cautiously in elderly patients and patients with cardiac disease. Check renal, hepatic, and auditory function periodically during prolonged hereby. Drug should be discontinued if abnormalities occur.

Proximal is an arthritis medication and is being used to treat Mrs. As osteoarthritis. The 20 MGM dose is standard. Broody, T et al (1994: 397) does not recommend a time of day for taking the medication however scheduling with meals may reduce the drug’s possible adverse reactions – which include epigenetic distress and peptic ulceration. Because epigenetic distress and peptic ulceration is another possible side effect of proximal, the patient needs to be monitored for these symptoms. Implant suspension, 20 ml PRNG The AIMS Annual (2000: 1-7) includes the following factors in its outline of Implant.

Indications & dosage: Liquid 10 to 20 ml three to four times daily, preferably between meals and at bedtime. Adverse reactions: Constipation or diarrhea have rarely been reported with the use AT Implant Interactions: Concomitant use of antacid preparations may alter the absorption profiles of a wide variety of drugs. Potential for adverse reaction with dioxin. Nursing considerations: Use cautiously in elderly patients. Record amount and consistency of stools. Warn patient not to take Implant indiscriminately or switch antacids without doctor’s advice.

Implant is possibly being used to treat the side effects of proximal – epigenetic distress and peptic ulceration. If Mrs. A has these symptoms, they could be managed with alternate medications such as Loses or H2O histamine receptor blockers and/or a regulated diet. Coolly 120 MGM, 1 – 2 tablets at night The AIMS Annual (2000: 1-20) includes the following factors in its outline of Coolly. Indications & dosage: Adults – two 120 MGM tablets once a day after evening meal. Adverse reactions: Prolonged use may lead to diarrhea, with excessive loss of water and electrolytes, particularly potassium.

Nursing considerations: Should only be used occasionally. Don’t use for more than 1 week without doctor’s knowledge. It cannot be determined from the case study any reason for Mrs. A requiring a stool softener. If Mrs. A is suffering from constipation, alternate treatments could be tried before resorting to medications. Diet can be managed to increase fiber levels and promote stool movements. The problems of polychromatic in Mrs. As case Gaillardia, A, Bullock, S & Manias, E, (2001 : 1 5) outlines the major symptoms of polychromatic and defines it as “ the excessive and unnecessary use of medications”.

Elderly patients like Mrs. A are particularly susceptible to this problem. Use of medications with no apparent indication Mrs. A is taking drug therapy for conditions not diagnosed. The main example of this is her use of Coolly. No reason is evident in the case study as to why she should require a stool sterner. Use of duplicate medications Mrs. A may be receiving duplicated medications for the same symptom. It is possible that perpetrator and proximal are both being used to treat the same symptoms of her osteoarthritis.

There is no apparent reason given in the case study as to why she s taking perpetrator. Concurrent use of interacting medications There are several examples of this in Mrs. As case. The most noticeable is her use of perfumeries with dioxin. Perfumeries is known to increase dioxin sensitivity. Use of contraindicated medications Medications taken that are not appropriate to a particular condition can result in aggravation of other existing conditions. Mrs. As use of Coolly could further aggravate the gastric upset that can be a side effect of perfumeries, dioxin and proximal use.

Use of inappropriate dosage Mrs. A is receiving an excessive dose if dioxin. This is causing symptoms of dioxin poisoning. Use of drug therapy to treat adverse drug reactions Mrs. As treatment also falls into this category. She is most likely being treated with Implant suspension to alleviate epigenetic distress/peptic ulceration caused by proximal. Assessment, management & educational strategies that would have improved the outcome for Mrs. A Application of the clinical decision making process would have prevented the polychromatic problems faced by the patient.

Loeb, S. 2001 (2001: 22-26) outlines the 5 steps of the clinical decision making process: Assessment The nurse focuses on direct data collected by: Obtaining drug history Reviewing Mrs. As previous meal nelsons (Including Pensacola, occasional Ana emotional status) Performing a physical examination Obtaining relevant laboratory or diagnostic test results Formulating a nursing diagnosis Using information gathered during assessment, define any potential or actual drug- related problems.

The most common statements related to drug therapy are “ Knowledge deficit”, “ Noncompliance” and “ Alteration in Health Maintenance”. Planning Planning should ensure Mrs. As needs are being met – including nutrition and hygiene; that her condition is being monitored, and that tests are being carried out as ordered. Intervention/Education After developing the outcome criteria, the nurse determines the interventions needed to help Mrs. A reach the desired behavior and goals.

Drug related interventions may focus on education strategies about a drug’s action, adverse effects, scheduling, steps to avoid, treating drug reaction, as well as drug administration techniques – including compliance. Evaluation This is a systematic process for determining the effectiveness of nursing care. In geared to Mrs. As case, this would entail monitoring of observations and tests to determine their effectiveness and the evaluation of any adverse effects.