

Managing Chronic Conditions in Elders

Anita Botruff, MSN, RN, ASLNC

What is Health?

- The World Health Organization
- Jean Watson
- Florence Nightingale

Institute of Medicine [IOM]

- Defines patient-centered care as:
 - “Providing care that is respectful of and responsive to the individual patient preferences, needs, values and ensuring that patient values guide all clinical decisions”

Disease

- “It is more important to know what sort of person has a disease than to know what sort of disease a person has.”

Hippocrates

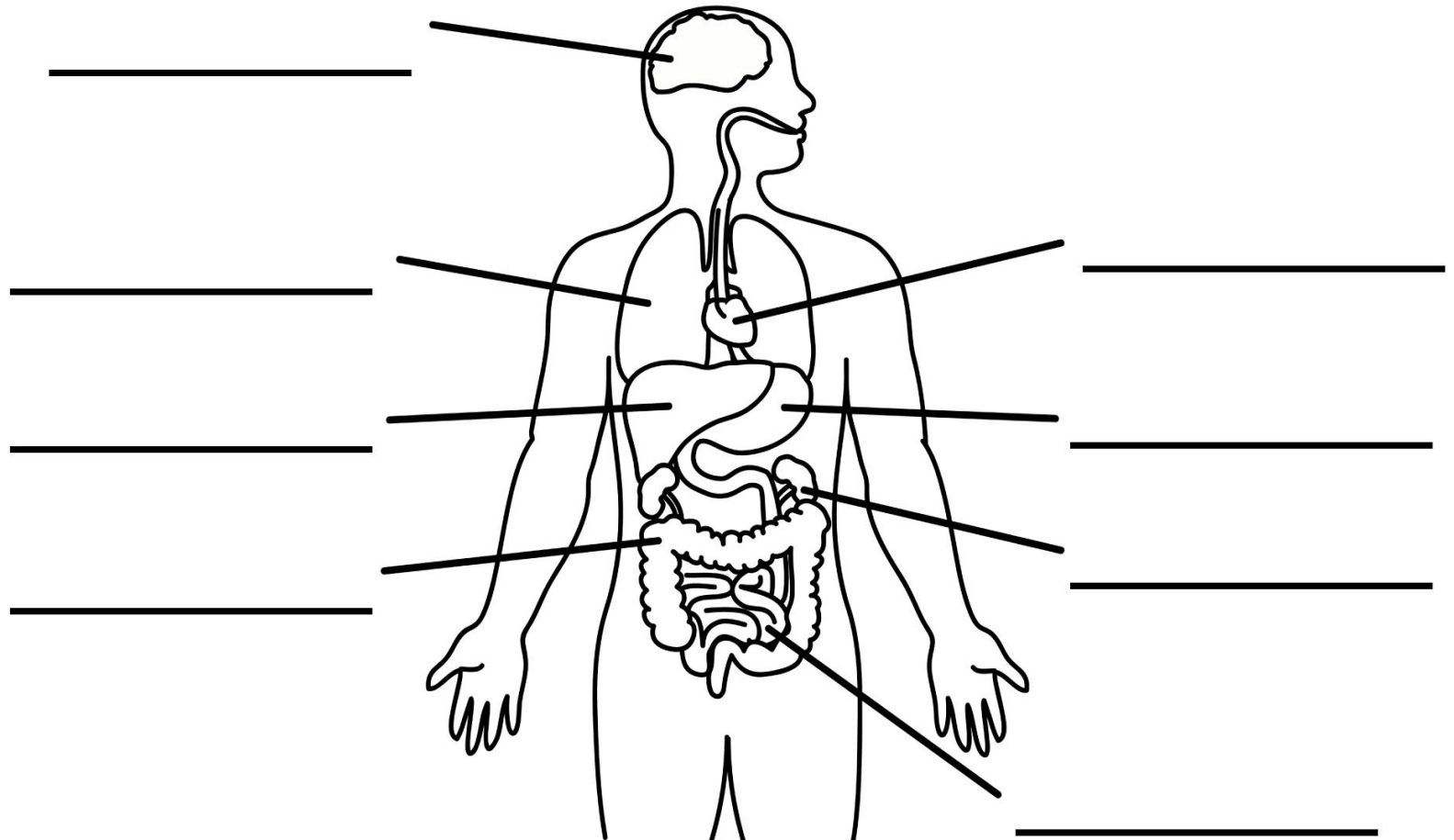
Care of Elder Client

- Age related physiological changes
 - General concepts

Age Related Physiological Changes

- The incidence of chronic disease increases markedly as we age. WHY?

Age Related Physiologic Changes



Care of Elder Client

- Age related physical changes
 - Integumentary
 - Eyes
 - Ears

Care of Elder Client

- Age related physical changes
 - Breast
 - Thorax & Lungs
 - Cardiovascular

Care of Elder Client

- Age related physical changes
 - Gastrointestinal
 - Musculoskeletal
 - Neurological

Care of Elder Client and Drug Therapy

- Drug therapy

General Considerations with Elders

AGS BEERS CRITERIA FOR POTENTIALLY INAPPROPRIATE MEDICATION USE IN OLDER ADULTS

FROM THE AMERICAN GERIATRICS SOCIETY

This clinical tool based on The AGS 2012 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults (AGS 2012 Beers Criteria) has been developed to assist healthcare providers in improving medication safety in older adults. Our purpose is to inform clinical decision-making concerning the prescribing of medications for older adults in order to improve safety and quality of care.

Originally conceived of in 1991 by the late Philip Beers, MD, a geriatrician, the Beers Criteria catalogue medications that have adverse drug effects in older adults due to their pharmacologic properties and the physiologic changes of aging. In 2011, the AGS updated all content of the criteria, expanding its scope of sources and finding the strongest level of evidence and strength of evidence, using the American College of Physicians' Grading System, which is based on the GRADE scheme developed by Guyatt et al.

The full document together with accompanying resources can be viewed online at www.ags.org/geriatrics.

INTENDED USE

The goal of this clinical tool is to improve care of older adults by reducing their exposure to Potentially Inappropriate Medications (PIMs).

- This tool should be viewed as a guide for identifying medications for which the risks of use in older adults outweigh the benefits.
- These criteria are not meant to be applied in a positive manner.
- This list is not meant to represent clinical judgment or an individual patient's values and needs. Prescribing and managing disease conditions should be individualized and involve shared decision-making.
- These criteria also underscore the importance of using a team approach to prescribing and the use of non-pharmacologic approaches and of being sensitive and respectful to patients for this type of moral.
- Health criteria such as the STOPP/START criteria and Medication Appropriateness Index should be used in a complementary manner with the 2012 AGS Beers Criteria to guide clinicians in making decisions about safe medication use in older adults.

The criteria are not applicable in all circumstances (eg, patients requiring palliative and hospice care). If a clinician is not able to find an alternative and chooses to continue to use a drug on this list in an individual patient, discussion of the medication as potentially inappropriate can serve as a reminder for close monitoring so that the potential for an adverse drug effect can be recognized near the medical record and prevented or detected early.

TABLE 1. 2012 AGS Beers Criteria for Potentially Inappropriate Medication Use in Older Adults

| Organ System/Therapeutic Category/Drug(s) | Recommendation, Rationale, Grade of Evidence (G) & Strength of Recommendation (S) |
|---|---|
| Anticholinergics (AChE) | |
| First-generation anticholinergics (eg, atropine or an oral combination product) | Avoid. |
| <ul style="list-style-type: none"> • Atropine • Benztropine • Chlorzoxazone • Cyclopentolate • Darifenacin • Donepezil • Dicyclanil • Diphenhydramine • Doxylamine • Enoxacin (oral) • Flurazepam • Homatropine • Methocarbamol • Trihexyphenidyl | Highly anticholinergic; adverse effects increased with advanced age and outweigh the clinical benefit; used as hypnotic; increased risk of confusion, dry mouth, constipation, and other anticholinergic effects; toxicity. |
| <ul style="list-style-type: none"> • Donepezil • Rivastigmine • Tacrine • Memantine | Use of cholinesterase inhibitors in special situations such as acute treatment of severe allergic reactions may be appropriate. |
| <ul style="list-style-type: none"> • Donepezil • Memantine • Tacrine | G2 = High (Hydrous and Formoterol); Moderate (S) (other); S3 = Strong. |
| Antipsychotic agents | |
| <ul style="list-style-type: none"> • Seroquel (oral) • Thioridazine | Avoid. |
| | Not recommended for prevention of antipsychotic symptoms with antipsychotics; more effective agents available for treatment of Parkinson disease. |
| | G2 = Moderate (S) = Strong. |

Table 1 (continued on page 2)

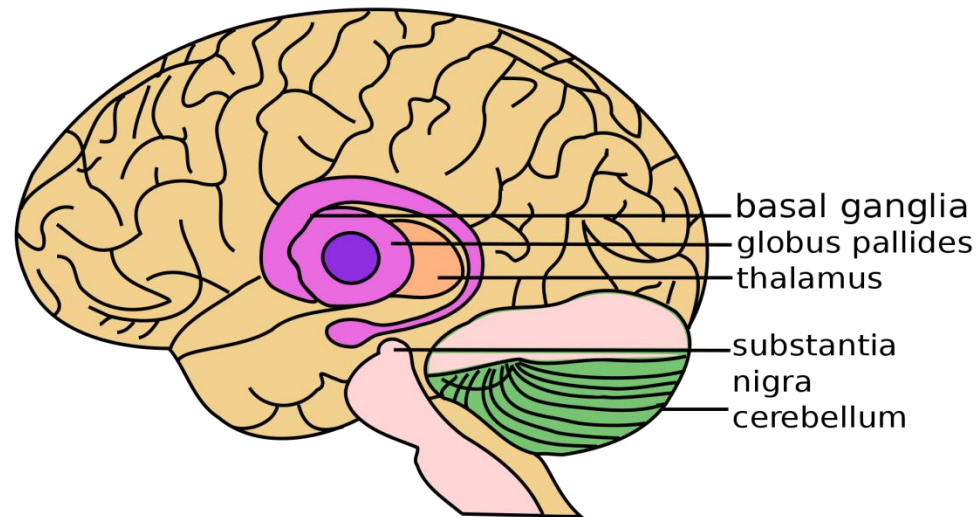
| Organ System/Therapeutic Category/Drug(s) | Recommendation, Rationale, Grade of Evidence (G) & Strength of Recommendation (S) |
|--|--|
| <ul style="list-style-type: none"> • Amoxicillin • Beta-blockers (oral) • Calcium-channel blockers • Digoxin • Furosemide • Hydrochlorothiazide • Lisinopril • Metoprolol • Nifedipine • Nitroglycerin • Quinidine • Verapamil | Avoid except in short-term palliative care to decrease oral secretions. |
| | Highly anticholinergic; uncertain effectiveness. |
| | G2 = Moderate (S) = Strong. |
| Antipsychotics | |
| <ul style="list-style-type: none"> • Clozapine and promazine* (also see note in the anticholinergic psychotropic class section) | Avoid. |
| | They cause anticholinergic symptoms; more effective alternatives available. (S) (other) (S) = Strong. |
| | G2 = Moderate (S) = Strong. |
| <ul style="list-style-type: none"> • Haloperidol* | Avoid. |
| | Less effective alternative available. |
| | G2 = Moderate (S) = Strong. |
| Antipsychotics | |
| <ul style="list-style-type: none"> • Risperidone | Avoid for long-term suppression; avoid in patients with QTc ≥ 440 ms. |
| | Potential for pulmonary toxicity; safer alternatives available; lack of efficacy in patients with QTc ≥ 440 ms; not to be stopped; drug concentration in the urine. |
| | G2 = Moderate (S) = Strong. |
| Cardiovascular | |
| <ul style="list-style-type: none"> • Amlodipine • Atenolol • Diltiazem • Furosemide • Lisinopril | Avoid use as an antihypertensive. |
| | High risk of anticholinergic symptoms; not recommended as routine treatment for hypertension; alternative agents have superior renal safety profile. |
| | G2 = Moderate (S) = Strong. |
| <ul style="list-style-type: none"> • Amlodipine • Carvedilol • Diltiazem • Furosemide • Lisinopril • Metoprolol (S, S) (high)* | Avoid diltiazem as a first-line antihypertensive. Avoid with urea or lactate. |
| | High risk of adverse CNS effects; may cause bradycardia and anticholinergic symptoms; not recommended as routine treatment for hypertension. |
| | G2 = Low (S) = Strong. |
| <ul style="list-style-type: none"> • Atenolol (S, S) (high)* | Avoid antipsychotic drugs as first-line treatment of atrial fibrillation. |
| <ul style="list-style-type: none"> • Amoxicillin drug (oral S, S, S) • Amoxicillin • Clozapine • Digoxin • Donepezil • Furosemide • Hydrochlorothiazide • Quinidine • Seroquel | Avoid antipsychotic drugs as first-line treatment of atrial fibrillation. |
| | Drug suggests that rate control yields better balance of benefits and harms than rhythm control for most older adults. |
| | Amoxicillin is associated with multiple outcomes, including thyroid disease, pulmonary disorders, and QT interval prolongation. |
| | G2 = High (S) = Strong. |
| <ul style="list-style-type: none"> • Clozapine* | Avoid. |
| | Clozapine is a potent negative inotrope and therefore may reduce heart failure in older adults; strongly anticholinergic; other antipsychotics drugs preferred. |
| | G2 = Low (S) = Strong. |
| <ul style="list-style-type: none"> • Digoxin | Avoid in patients with permanent atrial fibrillation or heart failure. |
| | These symptoms have been reported in patients taking these diuretics who have permanent atrial fibrillation or heart failure; in general, rate control is preferred over rhythm control for atrial fibrillation. |
| | G2 = Moderate (S) = Strong. |
| <ul style="list-style-type: none"> • Digoxin 10-12 mg/day | Avoid. |
| | In heart failure, higher strengths associated with no additional benefit and may increase risk of toxicity; decreased renal clearance may increase risk of toxicity. |
| | G2 = Moderate (S) = Strong. |

Care of the Patient with Parkinson's Disease

Parkinson's Disease

- Incidence of Parkinson's
- Pathophysiology of Parkinson's

Basal Ganglia and Related Structures of the Brain



Parkinson's Disease

- Assessment
- Nursing Interventions

1



2



3



Parkinson's Disease

- Pharmacological Management of Parkinson's Disease
- Gold standard

Parkinson's Case Study

- An 87-year-old male with Parkinson's Disease is in a long-term-care facility. Upon examination, the nurse notes:
 - BP is 110/60, pulse 94, respirations 20, temp 99.5
 - Has classic Parkinson's symptoms: resting tremors, fixed gaze, drooling & rigid extremities.
 - Alert but doesn't respond to questions
 - He eats pureed food & has difficulty swallowing with some choking
 - Skin assessment: reddened sacrum & hips bilaterally
shallow ulcers on bilateral heels; ecchymotic areas on upper extremities

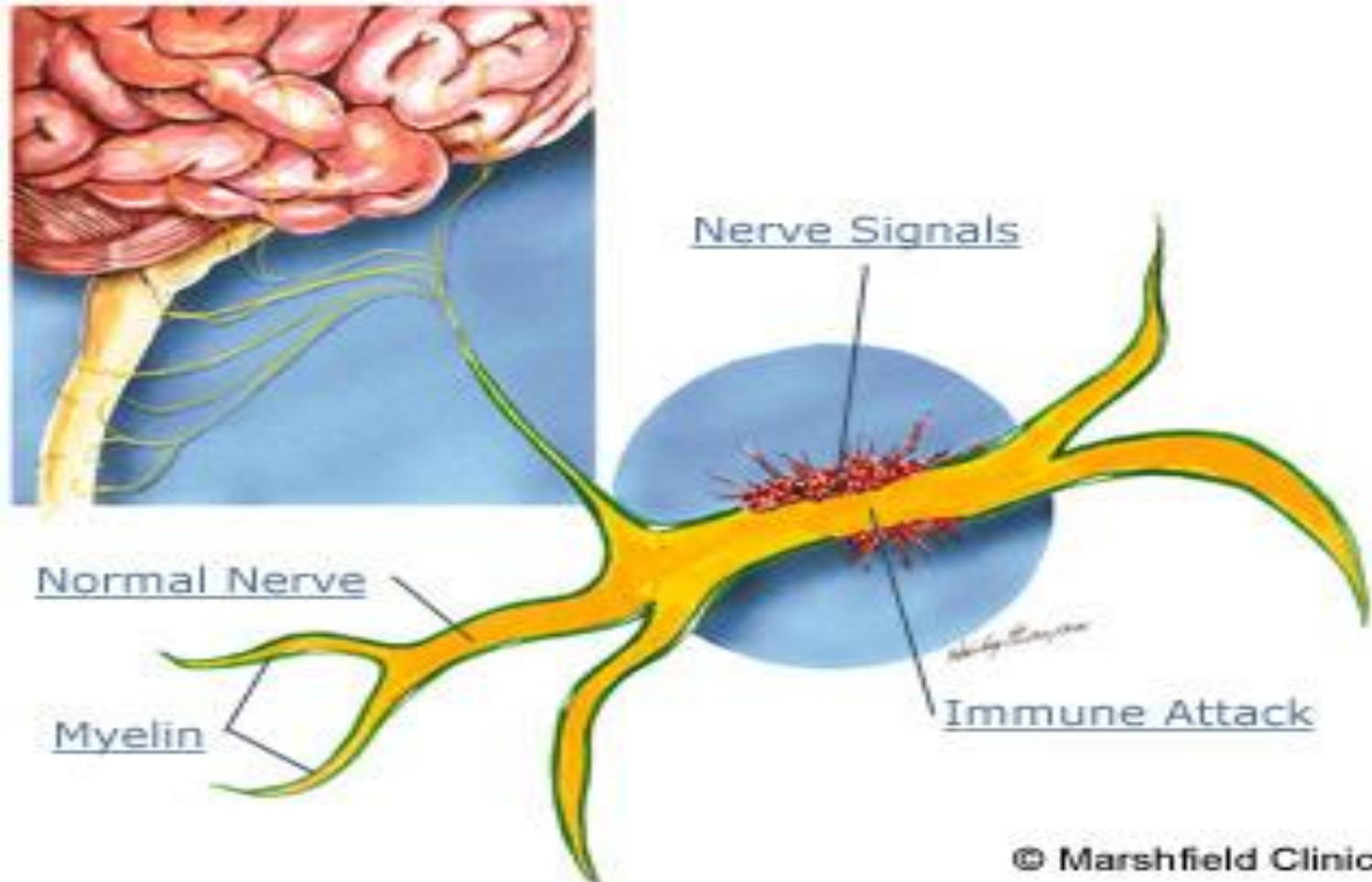
What is the nurse's main priority?

Care of the Patient with Multiple Sclerosis

Multiple Sclerosis

- Incidence
- Pathology

Multiple Sclerosis



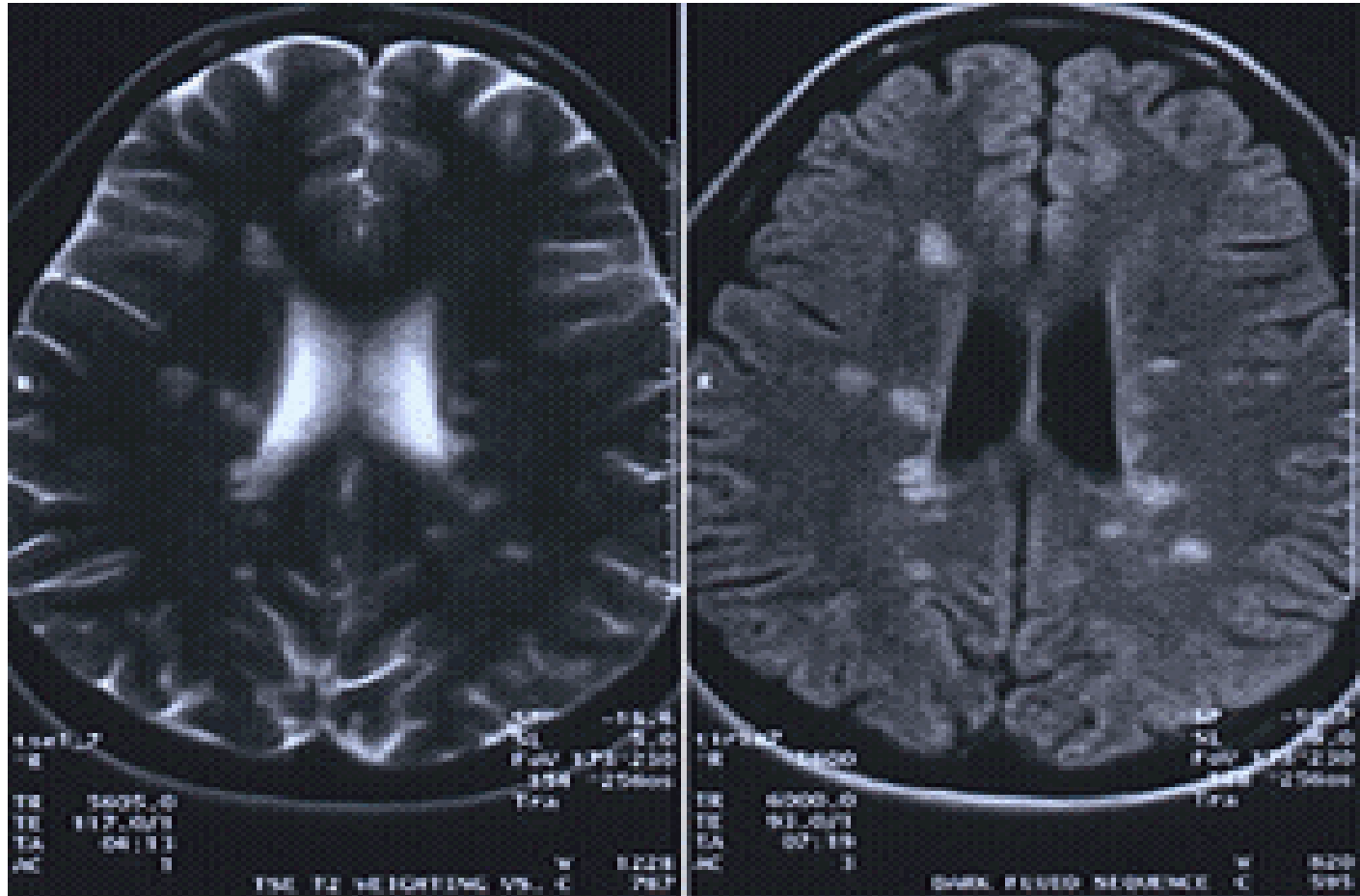
Etiology of Multiple Sclerosis

- Exact cause – unknown
- Genetics
- Viruses

Pathophysiology of MS

- Nerve impulses are transmitted from one nerve cell to another

MRI – Multiple Sclerosis – multiple white areas



Multiple Sclerosis

- Assessment
- Interventions

Medical Treatment Strategies of Multiple Sclerosis

- Goal of treatment:
 - Glatiramer
 - Interferon

Medical Treatment Strategies of M.S

- Zocor Studies
- Steroid
- Immune Modulator

Multiple Sclerosis Case Study

- A 31-year-old female with Multiple Sclerosis presents to her physician's office with complaints of frequently dropping items and urinary retention. She informs her physician that her sister recently died in a MVA.
- Upon assessment:
- BP 130/88, pulse 94, Resp 20, Temp 99.1
- Muscle Strength Right UE 2+/5+; Left UE 4+/5+
Right LE 2+/5+; Left LE 4+/5+
- Ataxia
- Abdominal distention

What is the nurses main priority?