



Principles of Geriatric Assessment, Diagnosis and Management

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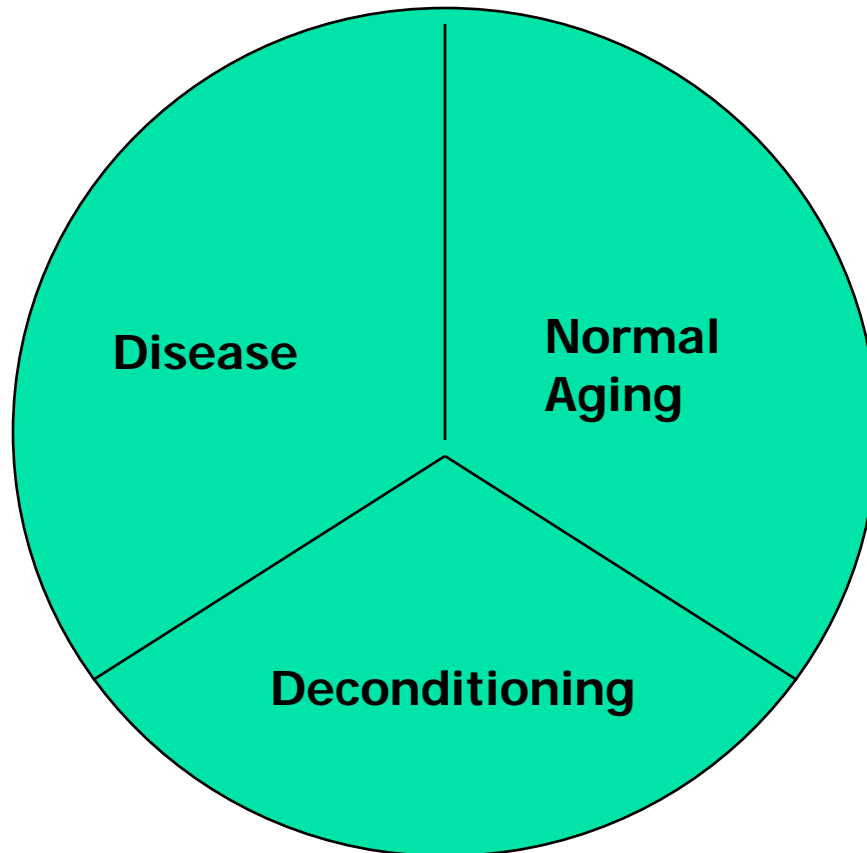
Geriatric Refresher Day: March 21, 2012

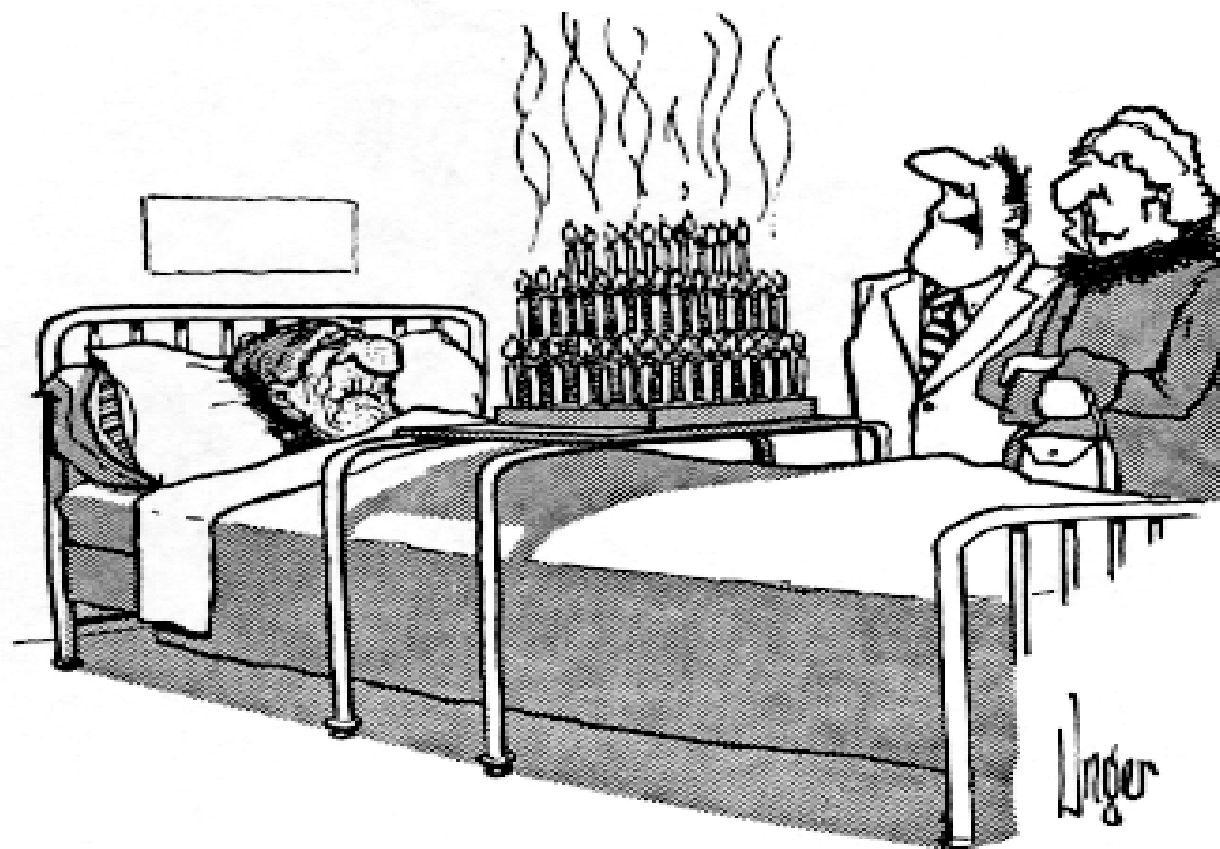


Normal Aging = *Homeostenosis*

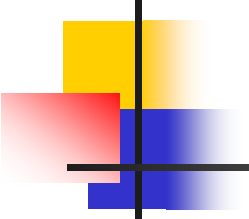
- In all body systems, normal aging decreases reserve approximately 1% per year.
- Homeostenosis does not cause symptoms.
- Aging decreases reserve therefore elderly are sicker/quicker and slower to recover.
- **NORMAL** aging causes **NO** symptoms

The Elderly and Physiologic Decline





"If she has one more birthday, this whole place is gonna go up!"



Prevalence of Chronic Diseases (2 or More)

At age 65-69: 35% (men)
 45% (women)

At age 80: 53% (men)
 70% (women)



Chronic Diseases

1. Diabetes
 2. Heart Failure
 3. Chronic Lung Disease
 4. Hypertension
 5. Arthritis
- ... ?? Dementia??



Characteristics of Chronic Disease Management

- Problem list approach
- Time consuming
- ↑ need other professionals
- Self care important
- Complicated
- (Guideline Gridlock)



The First Safety Net for Seniors

1 = comprehensive proactive primary care (physician → FHT)

- Chronic disease management.



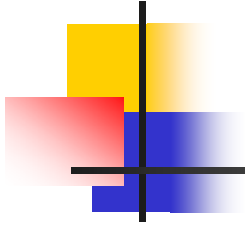
The Elderly in Canada

Well 80%

Frail 15%

Institutionalized 5%

(The frail elderly are 3% of Canada's population and represent 30% of healthcare costs)



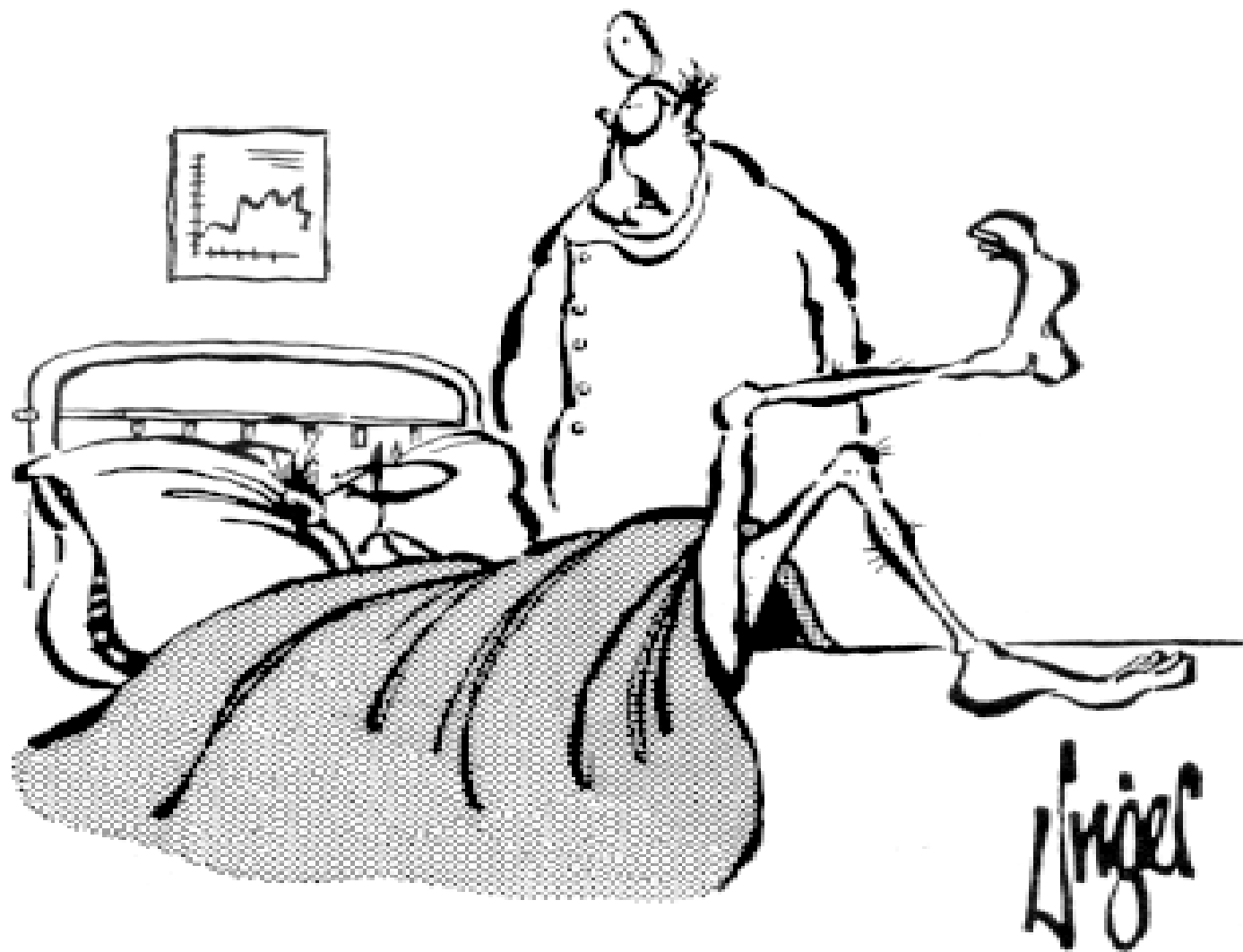
The 2nd safety net for seniors

2. Health promotion



1^o Prevention

1. Tobacco Cessation
2. Nutritional Advice
3. Calcium: 1200-1500 mg elemental Calcium daily
4. Exercise
 - Aerobic (5 years)
 - Strength (174%)

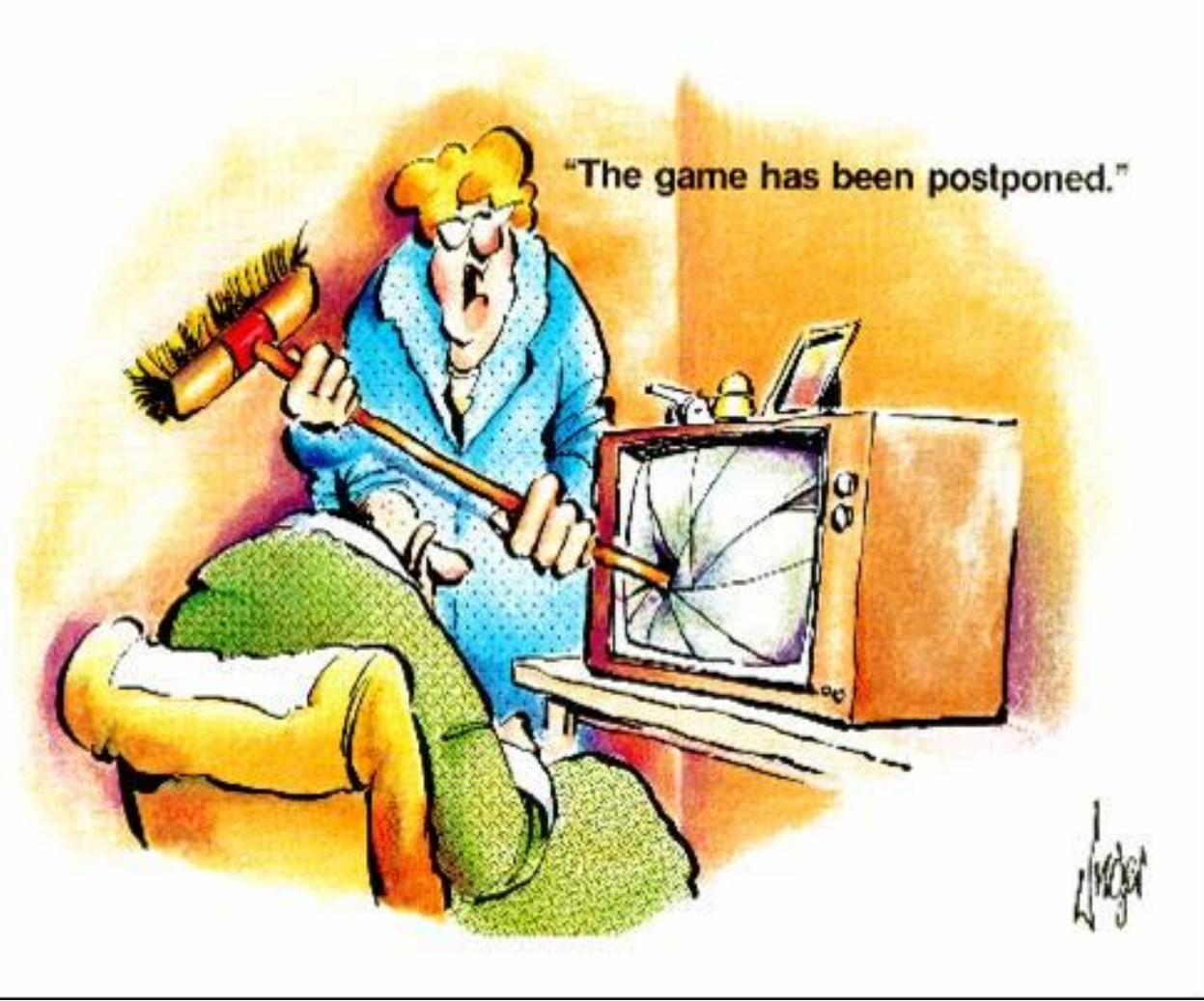
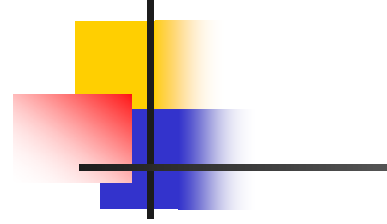


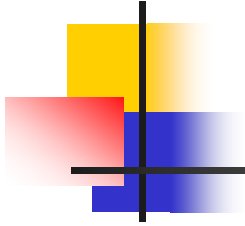
**“I don't think you're strong
enough to get out of bed yet.”**



1^o Prevention

5. Safe Driving – Counselling /“Screening”
6. Vaccinations
 - Influenza (annual)
 - Pneumococcal – high risk, ? 65+, (once or twice?)
 - Tetanus – single booster at age 65
 - Herpes
7. Advice re: sun exposure.
8. Vitamin D 1000 IU





-
- The 3rd safety net for seniors

3. CGA



Case presentation

- Mrs. I.M. Confused is a 80 year old retired secretary living with her daughter and her family.
- She goes to the Emergency Room with falls and agitation over the past 36 hours.



Mrs. C

- Mrs. C had lived in a small 2 story house where she had resided for over 40 years becoming more isolated since the unexpected death of her spouse 1 year ago.
- Her only daughter who lives in B.C. reports that she is becoming more and more suspicious of caregivers who come to her home. She has had 2 falls in the home – 3 months ago.
- Medical history includes, osteoarthritis, chronic pain, hypertension, constipation, previous compression fracture of L1, TIA 2 years ago with slurred speech.



On examination

- She is restless and anxious.
- She denies depression (Yesavage GDS = 2/15)
- She reports a decreased appetite,, decreased energy which she attributes to pain. She is afraid of falling as is fearful that she will suffer another fracture as she has in the past.
- She denies any memory complaints.



Exam - continued

- She appears frail although is neatly groomed - is 5'1" tall, 90 pounds with notable kyphoscoliosis. Spinal processes are tender throughout the lumbosacral region, decreased ROM of hips bilaterally with pain on external rotation of the L hip. Quad strength decreased bilaterally.
- Blood pressure is 180/70 sitting and 150/50 when standing. HS are normal, lungs are clear, Abd - mild discomfort diffusely, BS normal.
- Folstein MMSE 18/30 with impairment in orientation to time, place, recall, calculation and visuospatial. She has difficulty completed the clock drawing test.



Current medications

- HCTZ 12.5 mg daily
- Olanzapine 5mg hs
- Elavil 10mg bid
- Colace 200 mg bid
- Senokot 2 tabs daily
- Ibuprofen 200mg tid prn for pain
- ASA 325mg q4h prn for pain
- Tylenol 500mg q4h prn for pain
- Gravol 50mg prn for sleep
- Ativan 1mg tid prn for anxiety or insomnia



What's Going On??

“? What are possible new Diagnoses?”



Remember Homeostenosis = Low Reserve

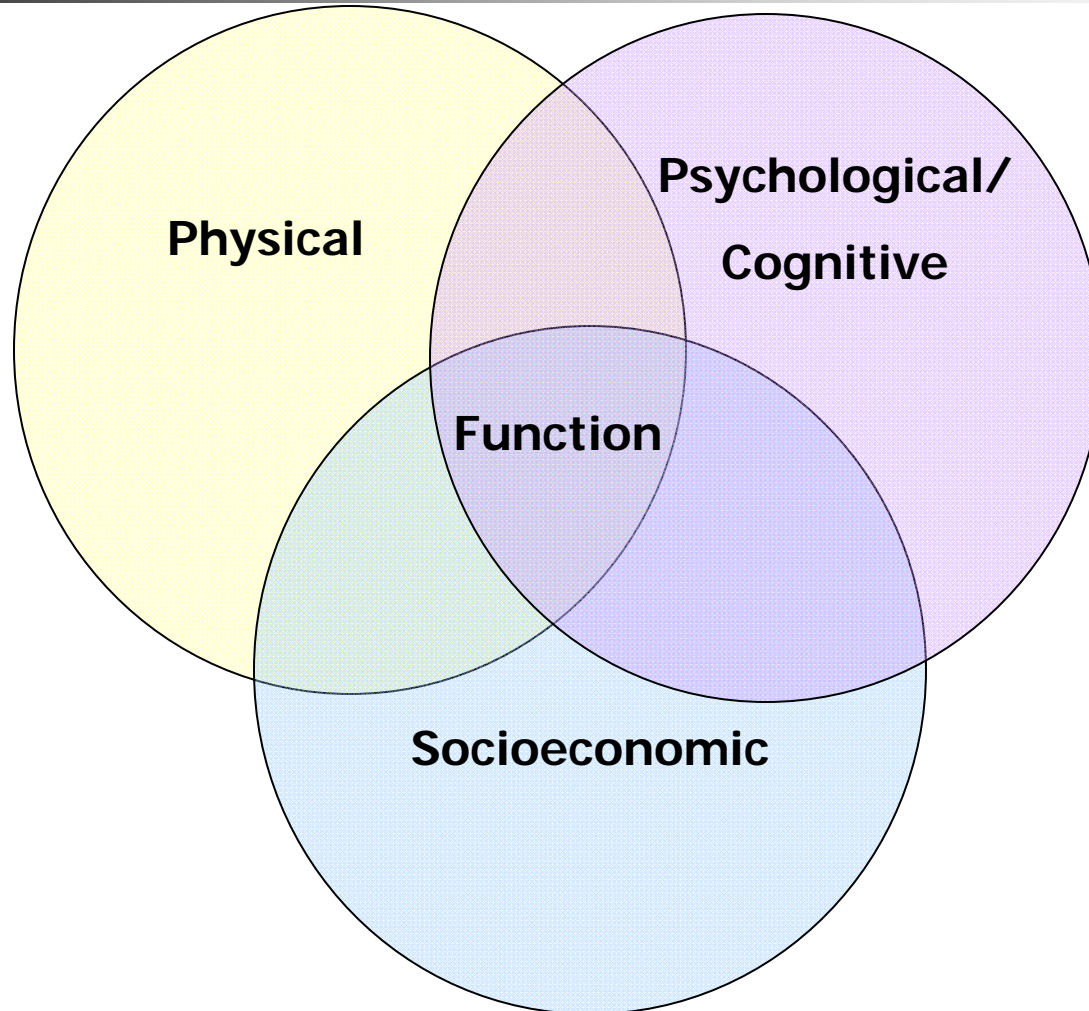
1. Sicker quicker.
2. Domino deterioration.
3. Slower rehabilitation/recovery



What is Different About “Geriatric” Patients?

- Pre-morbid status: Well/Frail/Dependent
- Multiple diseases = **complexity** → problem list approach.
- Environment (Stairs?)
- Family Support
- \$ to buy extra support
- DDD Common
- Drugs, Drugs, Drugs

Interacting + + +



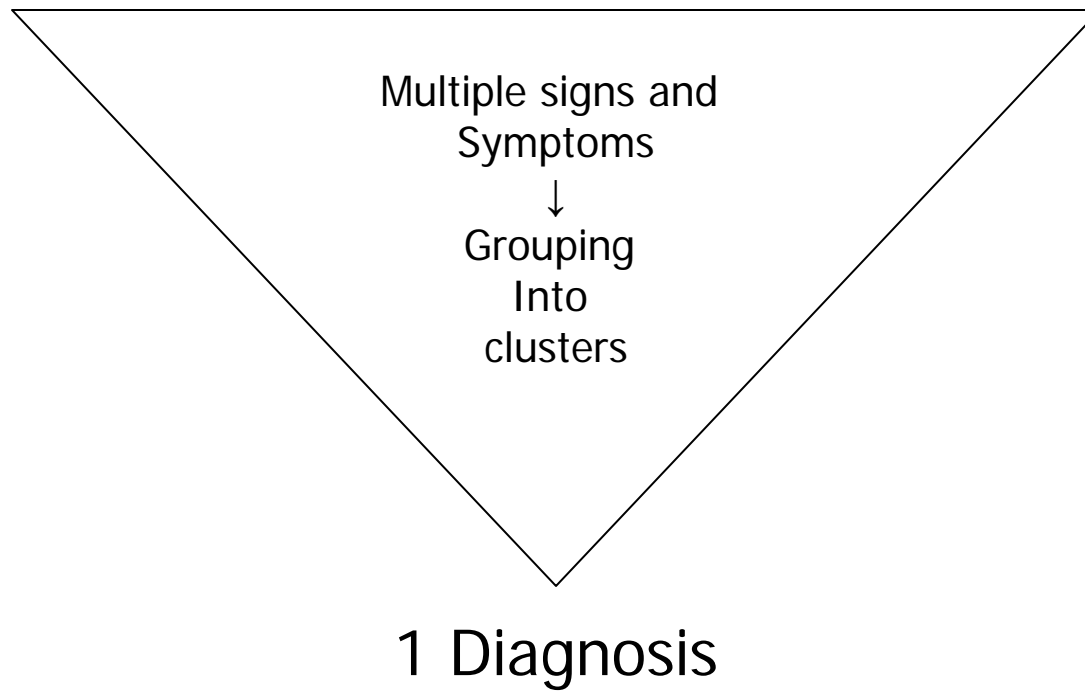


Some Key Problems for Mrs. Confused

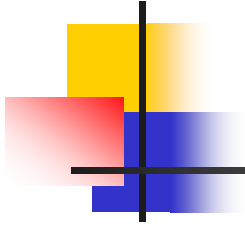
1. Cognitive: Dementia, Delirium or both (affects discharge from Emerg)
2. Income = OAS + GIS \$14,000/year = \$3,000 below poverty line)
3. Premorbid frailty and then dwindles
4. Environment = stairs
5. No family.
6. ? Depression ?
7. Drug side effects



Top Down Usual Medicine



Geriatric model – you don't just want to know 1 cause for falling, you want to know ALL causes



Characteristics of Diseases in the Elderly

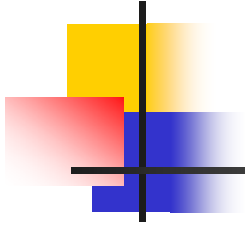
- Chronic or acute on chronic
- Multiple and interacting
- Often present atypically

Atypical presentations of disease are frequently seen

- Classical
- Silent
- Atypical Presentations
 - Weakness/Fatigue
 - Dwindles
 - Falls/Immobility
 - Incontinence
 - Cognition/Mood Change
 - Social Crisis

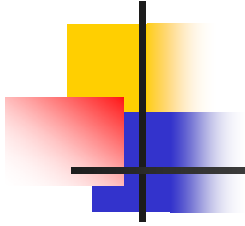


“Geriatric
Giants”

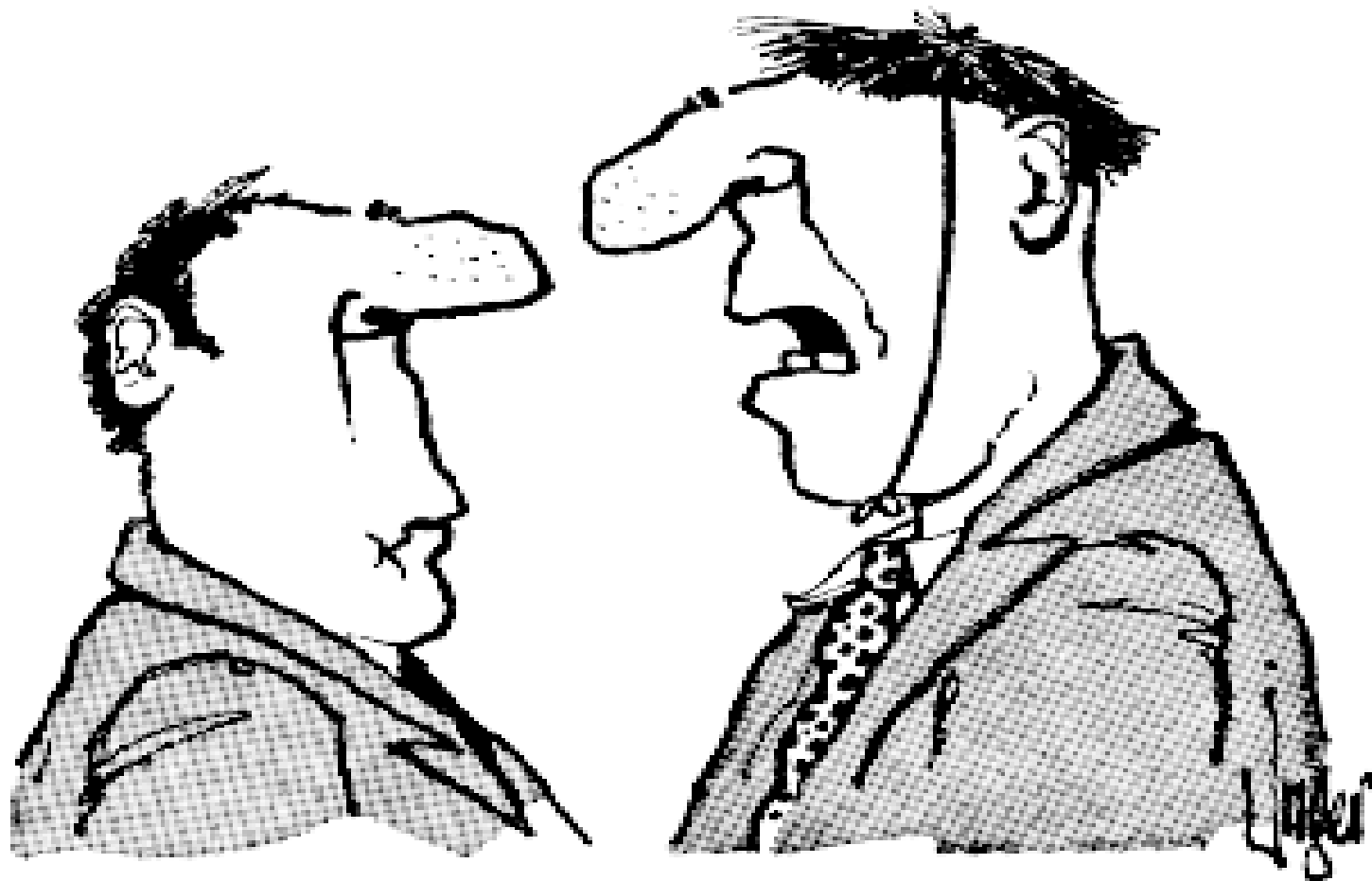


What are **SOME** atypical presentations of depression?

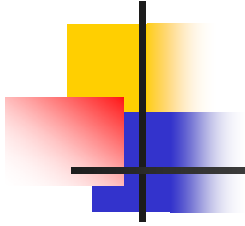
- Lack of sadness
- Anxiety
- Alcoholism
- Chronic pain
- Disability
- Pseudodementia
- Delusions/hallucinations



What are **SOME** atypical presentations of depression?



"You spotted it, eh?"



What is CGA: Comprehensive Geriatric Assessment



What is Comprehensive Geriatric Assessment?

- A systematic comprehensive problem list focused evaluation of an older person.
- Focus is appropriate medical diagnoses of acute/subacute diseases often superimposed on a background of chronic interacting diseases.



What is Comprehensive Geriatric Assessment?

- But focus is also on function, social support, patient and family wishes/expectations and quality of life.

Ultimately focus on management and function not cure.



CGA has 2 Viewpoints

1. A gestalt “eyeball” estimation of overall status and trajectory.
 - Well, frail, dependent, terminal
 - Stable, dwindles, acute crash.
2. An obsessive compulsive nitpicky detail oriented approach entailing lists and tools.

The History is 90% Diagnostic

- The key technology of Geriatrics is the telephone.





COUNT THE NUMBER OF “F’S”

**FINISHED FILES ARE THE RESULT
OF YEARS OF EXPERIENCE
COMBINED WITH MONTHS OF
SCIENTIFIC RESEARCH**



Geriatric Medicine Assessment

2. Past Medical History

- New vs Old

3. Drugs, Drugs, Drugs, Drugs

4. Premorbid Function = Goal

- 3 Months Ago Completely Independent



Geriatric Medicine Assessment

5. Social Support

- Optimism/Hope/Realistic
- Goal Setting (Individualized)

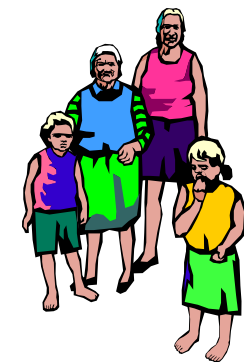
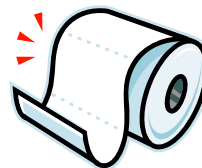


Key Aspects of History and Physical Examination and Lab

1. Past life – make a connection - ? Most interesting?
2. Screen mobility/falls/transfers/ambulation/ GGT
3. Ask about depression (GDS), alcohol (CAGE), bowel and bladder, nutrition.
4. Cognition Screen (Dementia Quick Screen), assessment (MMSE/MoCA)
5. PADL/IADL (Lawton/Katz) and environment.

Basic Activities of Daily Living (BADLs)

- Toileting, self hygiene, bathing, grooming, dressing, feeding, and ambulation (stairs too).
- For each ask if independent, needs assistance or dependent entirely on a caregiver.
- Captured in Barthel ADL index (BAI) in research.



Think of BADLs as those personal things a grade 1 student has to do each morning to get ready for school.

Instrumental Activities of Daily Living (IADLs)

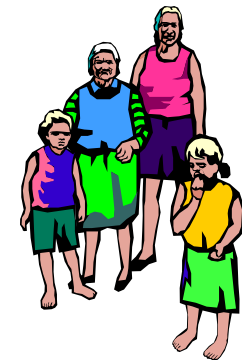
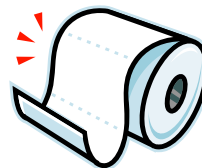
- Tasks and roles you do at home
- Shopping, meal planning & preparation, housekeeping, laundry, transit, financial management, using a telephone, medication management and driving
- In the research often captured with the Lawton-Brody instrument.



Think of things you have to do to go away to college/university!

Basic Activities of Daily Living (BADLs)

- Toileting, self hygiene, bathing, grooming, dressing, feeding, and ambulation (stairs too).
- For each ask if independent, needs assistance or dependent entirely on a caregiver.
- Captured in Barthel ADL index (BAI) in research.



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Key Aspects of History and Physical Examination and Lab

6. Special senses: hearing and vision
7. Check weight, blood pressure (lying and standing).
8. Ask about pain (ache/soreness) 1/3 → are positive
9. Targeted lab tests per history and physical.
 1. Albumen (nutrition)
 2. Ca++ and TSH (the great imposters),
 3. Cr/Hgb/blood sugar = common problems.
10. Only do tests/investigations if management will change.



Laboratory = Geriatric Assessment (1/20 tests Positive)

Unchanged

- Hgb/HCA
- WBC
- Platelet count
- BUN
- Electrolytes
- Liver function
- TSH/T4
- Calcium

Changed

- ESR (slight ↑)
- Glucose (tolerance ↓)
- Cr (↓ 2° ↓ LBM)
- Albumen (mild ↓)
- Alk Phosphatase (mild ↑)
- Fe test (↓ is NOT normal aging)
- Urinalysis (asymptomatic changes common)

A "Change" is a Key Signal

**"He was very romantic when we first got married,
but you know how they change."**



Linger



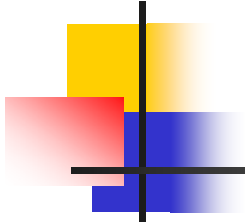
A Systematic Approach is NEEDED

1. Meds, meds, meds: often ADR are the diagnoses.
2. Question past medical history.
3. Function is key. (IADL/PADL)
4. Cognitive screening and assessment
5. Always consider depression.
6. Social support critical
7. Use of validated tools./instruments
8. Special senses.



Unfrailing: The Top 10

1. Health Promotion
2. Exercise
3. Early detection of acute illness (Geriatric Giants or atypical presentation)
4. Appropriate Treatment (acute and chronic) optimize co-morbidities
5. Review medication
6. Mobilize
7. Improve nutrition
8. Rehabilitation
9. Optimize environment – minimize personal disabilities
10. Maximize Caregiver support (family and formal)

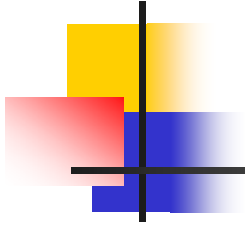


The Anti Geriatrician

- Diagnosis, diagnosis, diagnosis
- Multiple symptoms = 1 diagnosis
- Beyond terrible communicator
- Nasty & no time
- Patient = someone to do tests on
- Team = servants
- Uncaring to patient/family
- **CREATES ALC PATIENT**

The Ultimate Geriatrician

- Diagnosis, function, support
- 1 symptom = multiple problems
- Great communicator
- Nice & takes time
- Patient = person
- Team player
- Caring to patient/family
- **CREATES SAFE SUSTAINABLE DISCHARGES**



- When to do CGA or consider referral to Specialized Geriatric Services?



“Geriatric Giants”

In Geriatric Medicine, it is often more practical to think of problems or syndromes that cross several organ systems rather than starting with distinct disease diagnoses.

“**Geriatric Giants**” is a term coined by Bernard Isaacs, and the expression refers to the principal chronic disabilities of old age that impact on physical, mental and social domains of older adults. Many of these conditions, commonly misperceived to be an unavoidable part of old age, can in fact be improved.





When to Consider Referral to Specialized Geriatric Services

(Regional Geriatric Assessment Program)

1. Assessment and Evaluation of “Geriatric Giants”

- These are common final pathway problems often with multiple causes of critical importance that they have a major impact on function and quality of life.
- Acute or chronic change in cognitive status.
- Decrease in overall function/independence
- Falls/poor balance
- Decreased mobility



When to Consider Referral to Specialized Geriatric Services

(Regional Geriatric Assessment Program)

1. **Assessment and Evaluation of “Geriatric Giants”**

- Possible depression
- Possible iatrogenesis/polypharmacy

More urgent referrals should be considered if the problems are recent or acute in onset more likely to find reversible cause(s) if there is not a clear underlying cause, or if there are significant management difficulties.



When to Consider Referral to Specialized Geriatric Services

(Regional Geriatric Assessment Program)

2. The Frail and Falling (*"Vulnerable"*)

- Frailty is usually defined as those who are already suffering dependence in the activities of daily living (ADLs), or those who are at high risk of losing functional status. Failing usually refers to a frail elderly person who has suffered a recent further decline over the past several weeks - months.
- The multiple underlying causes can often be improved with appropriate assessment and intervention including rehabilitation.

When to Consider Referral to Specialized Geriatric Services

(Regional Geriatric Assessment Program)

(Continued)

2. The Frail and Falling ("Vulnerable") *Continued*

- Not eating well
- Significant weight loss
- Increasing concern about the individual's ability to remain in the current living situation (consideration of institutional placement)
- Coping marginally for yet undetermined reasons (*"dwindles"*)
- Persons considered *"high risk"* for poor outcomes (*hospital admission, community crisis, institutional placement*).

When to Consider Referral to Specialized Geriatric Services

(Regional Geriatric Assessment Program)

(Continued)

3. Increasing Use/Demand on Services

Increased use of services or caregiver burden and stress are a marker of underlying health or functional problems which are potentially reversible with appropriate intervention.

- Increasing family physician visits/phone calls.
- Repeated hospital admissions or emerg room visits
- Increased family caregiver burden or caregiver burnout
- Increased need for CCAC (Home Care), community services

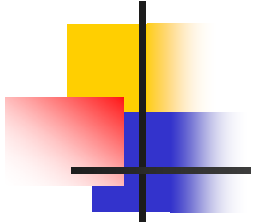


When to Consider Referral to Specialized Geriatric Services

(Continued)

4. Multiple and Complex Medical/Functional Problems.

Often those elderly with multiple health problems, particularly when impacting on functional status and independence can benefit from comprehensive geriatric assessment and intervention with access to multidisciplinary team (*OT, SW, PT, etc.*) resources.



THE NEW MODEL

