

Chapter 26: Comprehensive Geriatric Assessment: A Multidimensional Process Designed to Assess an Elderly Person's Functional Ability, Physical Health, Cognitive and Mental Health, and Socio-Environmental Situation

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Elderly persons have special needs and problems that often escape recognition and treatment until late in their course. When considering the older individual, it is important to be able to determine what findings constitute normal age-related changes compared with age-prevalent illness or an atypical and nonspecific presentation of disease. Because there are often several reasons for a given finding, one should not be too quick to conclude the “reason” for a specific issue; there may also be more than one reason for a particular presenting problem.

A well-formulated problem list is the best way to unlock the possible causes of each finding whether it is a key historical fact, physical finding, laboratory test abnormality, or some diagnostic test result. A “change” in what has been a stable problem or an acute functional decline should also alert the physician. Because many older persons have multiple interacting problems, a team of skilled professionals is often needed to provide a comprehensive evaluation to address current and future needs. The nephrologist has the advantage of already having experience caring for persons with chronic illness and multiple interacting problems. Dialysis also involves working with a team of skilled professionals, much like the model used in geriatric medicine. The following is a summary of key issues relating to comprehensive geriatric assessment and its possible benefits.

- The periodic comprehensive geriatric assessment should be part of a coordinated care plan with the patient's other health care providers.
- Individuals of significantly advanced age, those suffering from multiple and interacting medical problems, those on multiple medications, and individuals meeting criteria for “frailty” benefit most; elderly persons on

dialysis are optimal choices for periodic geriatric assessment.

- A comprehensive geriatric assessment provides a systematic approach to the collection of patient data; allows a patient's health status to be evaluated for existing and also potential problems; emphasizes functional capacity; and does not aim to cure all problems but rather identifies and suggests ways to maximize quality life years.
- The primary goal is to help the patient regain lost function and maintain as much independence as possible. It is important to note that physical and mental illnesses affecting the elderly often interact and result in a loss of functional ability much more than any one problem in itself. The elderly are particularly vulnerable as they have less “reserve capacity.”

There is a great variation in the way that geriatric assessments are conducted from single physician evaluations with referral to other skilled professionals as necessary to full teams of professionals evaluating all patients. In the latter case, a team meeting is usually held to discuss individual findings with the end product being a unified team care plan. The team may include representatives from medicine, nursing, dentistry, dietary, social work, audiology/speech, physical and occupational medicine, and psychology/psychiatry, among others. In the case of persons with renal failure who may or may not already be receiving dialysis with a carefully designed care plan, care plans developed after the Geriatric Assessment must be carefully coordinated to avoid conflicting plans, messages,

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or treatments. Proper and thorough communication is key to a successful outcome.

GOALS OF GERIATRIC ASSESSMENT

The goals of geriatric assessment are as follows: (1) provide a long-term solution for “hard to manage” patients with multiple physician and/or emergency room visits and hospital admissions with poor follow-up; (2) focus on preventive medicine rather than acute medicine; (3) focus on improving/maintaining functional ability and not necessarily a “cure”; (4) aid in the diagnosis of health-related problems; (5) develop plans for treatment and follow-up care; (6) establish plans for coordination of care; (7) determine the need for and site of long-term care as appropriate; (8) determine optimal use of healthcare resources; and (9) prevent readmission to the hospital.

The following are considered necessary components of a comprehensive geriatric assessment: (1) diagnoses and problems (past and current) based on history, physical examination, and appropriate diagnostic testing; assessment to include oral health, vision, hearing, and gait/posture¹; (2) detailed review of all prescription and over-the-counter medications including supplements/herbs with attention to side effect profile and potential drug–drug/drug–food interactions; (3) nutritional assessment including dietary recall/diary, anthropometric measurements, and laboratory testing as appropriate; (4) urinary continence/incontinence history; (5) assessment of bowel function; (6) assessment of cognitive ability and capacity for informed decision making²; (7) mental/emotional health; (8) functional abilities (activities and instrumental activities of daily living [ADLs and IADLs, respectively]) as independent, some help required, or dependent³; (9) assessment regarding ability to adhere to prescribed care plan; (10) spiritual needs/beliefs; (11) existing community support structure; (12) current and anticipated living environment; (13) legal issues including living wills, durable power of attorney, and end-of-life issues; and (14) fall risk assessment.

ADLs are further subdivided into physical or basic ADLs and IADLs. Basic ADLs include mobility, bathing, dressing, toileting, transferring, continence, and feeding. IADLs include the ability to use the telephone, shop, prepare food, housekeeping, laundry, transportation, taking medication, and managing money.

There have been many studies evaluating the benefits of geriatric assessment programs both in the ambulatory and inpatient setting. Clearly the financial cost-benefit impact varies with the type of program established, the personnel involved, and the ability to track outcomes.

In general, individuals who participate in a geriatric assessment program benefit from (1) greater diagnostic accuracy; (2) improved functional ability; (3) improved cognitive ability and emotional state; (4) reduced morbidity; (5) reduced adverse drug events; (6) reduced mortality; (7) decreased use of nursing home and readmission to hospitals; and (8) greater satisfaction with care.

ASSESSING FRAILITY

In recent years, there has been an increasing awareness that a subpopulation of elderly individuals are frail.⁴ Frailty is a clinical syndrome of weight loss, fatigue, and weakness and is considered to be a prognostic factor for poor outcomes.

Frailty criteria include weight loss, weakness, exhaustion, slowed walking speed, and low activity. The definition of frailty is met if three of these five are present.

Studies have shown a relationship between frailty and inflammatory markers, although these remain experimental at this time.⁵ Frailty has been associated with an increased risk for falls, worsening mobility, worsening ADL disability, hospitalization, increased recovery time from surgery and illness, and death.

GERIATRIC ASSESSMENT AND THE PATIENT WITH CHRONIC KIDNEY DISEASE AND/OR DIALYSIS

Chronic kidney disease (CKD) can accelerate the otherwise normal aging process and result in a decline in functional status and increased dependency on others for components of care. In most cases, patients with CKD have multiple medical problems in addition to CKD, particularly diabetes mellitus and hypertension, each with their own set of medical complications and requirements. Polypharmacy is the rule; a coordinated approach is essential to avoid fragmented care and conflicting treatments. Geriatric assessment programs may help to identify issues and play a role in optimizing healthcare for this at-risk population.

CONCLUSIONS

When considering the older person, it is important to consider what observations are a result of normal age-related changes compared with age-prevalent illness; diseases often present with non-specific and/or atypical findings as well. A comprehensive geriatric assessment can not only help identify issues that need to be treated but also help to recognize potential problems that deserve early consideration and preventive strategies. Older persons with CKD are at “double jeopardy” and clearly are ideal candidates for periodic geriatric assessment.

TAKE HOME POINTS

- A periodic geriatric assessment is of value, particularly to “frail” older persons and those with multiple medical problems and/or have had frequent hospitalizations/visits to the emergency room
- Benefits are many to both the patient and physician: a thorough assessment not only can identify existing issues to be dealt with but also helps to anticipate future problems that would benefit from proactive steps
- Assessment should encompass all aspects of the patient’s care and should not be limited to medical issues

- A team approach is the best way to make sure that all issues are identified and an appropriate plan developed
- Older persons who meet criteria for “frailty” are at particularly high risk of morbidity and mortality and have more significant consequences from medical interventions including surgery

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REVIEW QUESTIONS: COMPREHENSIVE GERIATRIC ASSESSMENT: A MULTIDIMENSIONAL PROCESS DESIGNED TO ASSESS AN ELDERLY PERSON'S FUNCTIONAL ABILITY, PHYSICAL HEALTH, COGNITIVE AND MENTAL HEALTH, AND SOCIO-ENVIRONMENTAL SITUATION

1. All of the following are goals of Geriatric Assessment except:
 - a. Develop plans for treatment and follow-up care
 - b. Establish plans for coordination of care
 - c. Determine optimal use of health care resources
 - d. Evaluate family history for causes of chronic kidney disease
2. All of the following are considered to be necessary Components of a Comprehensive Geriatric Assessment except:
 - a. Urinary continence/incontinence history
 - b. Existing community support structure
 - c. Fall risk assessment
 - d. Evaluation of a cardiac murmur
3. All of the following are criteria for a diagnosis of frailty except:
 - a. Weight loss
 - b. Weakness
 - c. Anemia
 - d. Slow walking speed
4. Which of the following is considered to be an ADL:
 - a. Use of a telephone
 - b. Ability to prepare food
 - c. Toileting
 - d. Ability to manage money
5. Which of the following is considered to be an IADL:
 - a. Mobility
 - b. Bathing
 - c. Transferring
 - d. Ability to take one's medications