What Is a Geriatric Syndrome Anyway?

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The term “Geriatric Syndrome” is commonly used but ill defined. In publications, authors claim that all sorts of conditions are a “Geriatric Syndrome”, including, but not limited to, delirium, dementia, depression, dizziness, emesis, falls, gait disorders, hearing loss, urinary incontinence, language disorders, functional dependence, lower extremity problems, oral and dental problems, malnutrition, osteoporosis, pain, pressure ulcers, silent angina pectoris, sexual dysfunction, syncope and vision loss. Can this be possible? Can any condition commonly encountered in older adults be a “Geriatric Syndrome”?

The Origins of “Syndrome”

The word syndrome seems to have appeared in an English translation of Galen in about 1541. Derived from the Greek roots “syn” (meaning “together”) and “dromos” (meaning “a running”), this term generally refers to “a concurrence or running together of constant patterns of abnormal signs or symptoms”. The term syndrome “has as its philosophic basis not specific disease factors, but a chain of physiologic processes, the interruption of which at any point produces the same ultimate impairment of body function”. Cushing’s Syndrome is a good example of a traditional medical syndrome wherein disruption of a single physiological process (excessive cortisol secretion) results in multiple common phenomenologies (Figure 1). These phenomenologies may manifest as general signs (hypertension, moon faces, truncal obesity), endocrine problems (impaired glucose tolerance, hyperlipidemia), skin problems (plethora, hirsutism, acne, striae), skeletal manifestations (osteopenia, myopathy) and psychiatric disturbances (depression, psychosis).

The Geriatric Syndrome

The term “syndrome” when applied to geriatric conditions has been at odds with the traditional use of “syndrome” from earlier times. One early definition of geriatric syndromes is conditions “experienced by older—particularly frail—persons, that occur intermittently rather than either continuously or as single episodes, may be triggered by acute insults, and often are linked to subsequent functional decline”. More recently, geriatric syndromes have been viewed as conditions in which “symptoms. . . are assumed to result not solely from discrete diseases but also from accumulated impairments in multiple systems” and develop when the accumulated effect of these impairments in multiple domains compromise compensatory ability. Both definitions are a significant departure from the traditional use of syndrome. The term syndrome as applied to geriatric conditions is thus the reverse of the traditional usage because the outcome is a single phenomenology rather than a spectrum of symptoms and signs, and results from numerous rather than a single disruption. In geriatric syndromes, it is multiple abnormalities that “run together” to cause a single phenomenology. For example, in delirium, the cumulative effects of multiple contributors (impaired cognition, severe illness, old age, etc.) result in the delirium phenomenology (Figure 2).

Applying the term syndrome to multifactorial conditions of older adults is misleading to those thinking in traditional terms, since there will be no spe-
Specific abnormality for the care provider to identify and potentially treat. This can lead some to conclude that a geriatric syndrome is “a usual concomitant of aging; that there may be no specific disease to identify, but instead undefinable erosions of mood or function”.[11] The result is an unfortunate sense of a frustrating condition with no clear approach and no likelihood of improvement. In this frustration, the care provider may miss the important point that, in multifactorial health conditions of older adults, there are usually multiple opportunities to intervene to improve the symptomatic issue for the patient.

Solutions

One resolution would be to dispense with the term “syndrome” for problems of older adults and to create a new term. Because multiple factors precipitate many health problems of older persons, the Greek root κοινόνεω (meaning, to do in common with, share, take part in a thing with another) seems appropriate. Thus, the term “geriatric synkoinon” could replace geriatric syndrome.

Another approach would be to create a greater appreciation of the specific meaning of syndrome when applied in a geriatric medicine context. This requires precision of expression and persistence by teachers and practitioners of geriatric medicine. Specifically, conditions would be defined as geriatric syndromes if they are multifactorial, occur primarily in older persons, result from an interaction between identifiable patient-specific impairments and identifiable situation-specific stressors, and interventions directed toward ameliorating the contributing factors result in a reduction in the incidence or severity of the condition in question. Delirium, falls and incontinence could be accepted as geriatric syndromes by this definition. Other conditions might qualify as the result of more research. Many continue to think wrongly that geriatric conditions arise from “undefinable erosions of mood or function”. As teachers and practitioners of geriatric medicine, it is our job to change this impression, and the precise use of language regarding “geriatric syndromes” is a good place to start.

References