

Clinicians' FORUM

From time to time, the editors of *Menopause Management* field interesting clinical questions and dilemmas. In this forum, our Editorial Advisory Board members and guest commentators,* experts in a range of fields related to midlife women's health, tell readers how they handle these situations.

The viewpoints expressed in "Clinicians' Forum" are those of the contributors, and not necessarily those of *Menopause Management* or The North American Menopause Society (NAMS).

Question: The term "geripause" has been used to characterize a phase of reproductive aging that begins in the postmenopause, presenting a new set of endocrinologic, metabolic and physiologic modifications with an increase in age-related changes. It has been suggested as a potentially beneficial term that would further promote the management of late menopause and, perhaps, beyond. Further study has proposed that ages 65-85 represent the early geripause, and 85 and older, the later geripause.

Do you think there is added value for a geripause component to be added to the Stages of Reproductive Aging Workshop (STRAW) classification? If so, do you anticipate any clinical care benefits? Are there any research-related benefits?

Answers:

Geripause is an essential interval in a woman's life and should be a component of the STRAW classification. Women differ significantly from

men in that estrogen, the hormone of reproduction, is severely reduced in a woman's early fifties (at menopause) and brings about a number of undesirable clinical events. Moreover, by age 65, at early geripause, women have a minimal amount of estrogen and most of the new problems are due to aging as well. Thus, while menopausal symptoms continue, aging also becomes a major effector. The onset of geripause brings modifications of the combination of estrogen and aging losses; geripause thus represents an important juncture for women, both with regard to menopause and to their overall health care.

Early geripause is defined as beginning at age 65, and late geripause at age 85. Initial studies, using the geripause components, show that dietary requirements, medical dosages, clinical laboratory standards and ranges, activity habits and health maintenance are markedly modified in these populations of women when compared with those in early menopause. Using older, non-specific terms, such as "late- or postmenopause," "climacteric," "post-reproductive" and "elderly," the persistent menopausal changes are not recognized. Numerical age does not easily define the status as well as a recognized component can.

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A number of accepted geripause factors have already been clearly delineated. Practitioners can recognize signs and symptoms associated with this period, and hence have a clearer baseline for making specific diagnoses and implementing specific treatments.

One example of clinical change is that the anticipated serum follicle-stimulating hormone (FSH) rise during perimenopause is followed by a serum FSH drop during geripause. The source of this decrease has not been clearly depicted and requires further study. Other evident differentiations are seen in geripause, sometimes abruptly, in all of the endocrine glands. Cellular changes in the heart and kidney result in acute or chronic disease



Bernard A. Eskin, MS, MD

states, often with rapid onset. These have been considered as due to aging alone, but they appear to be associated with the multiple hormonal intracellular gyrations from menopause and genetic sources. Bone physiology becomes most evident at geripause, with a significant rise in osteoporosis. Brain

changes—in cognition and depression—related to both menopause/geripause and aging are under intense study.

Adding this component to the STRAW classification would provide an important division for assessing women's health care and enhancing related research. Quality of life for the geripausal woman is dependent on associated treatment that might provide comfort and improve bodily functions. Dose levels for all classes of medications would be computed and classified specifically for geripausal patients. Pharmacologic dose-response evaluations could "fine-tune" these therapies and permit more novel approaches. Ideally, this population needs new treatment methods. Perhaps, this may reduce polypharmacy, common in the elderly, and a generation of properly dosed specific products would reduce complications. Geripause definition will also provide an opportunity for pertinent social

and economic community studies, leading to a better understanding of this transitional group and what expectations they may have. Specific techniques could be used to condition and reduce the psychological trauma that occurs.

Thus, defining and utilizing geripause as a component is ideal preparation for improving health care and increasing research for older menopausal women in the 21st century. The 20th century witnessed improved longevity and biological health; the 21st century can add vitality and enjoyment to the increased lifespan.

—Bernard A. Eskin, MS, MD

The question of when postmenopause begins and ends has yet to be fully answered. In 2001, STRAW attempted to answer this question by using a staging system in which the postmenopausal period of reproductive aging was divided into two stages.¹ The first stage, known as +1, was deemed the early postmenopause, and was further divided into "A" (12 months after menopause) and "B" (the next 4 years); based on the mean age at menopause (51.4 years), this translates into an age of approximately 55 or 56.4 years for those in postmenopausal stage +1. The second stage, +2, would then extend from the mid-fifties until death.

The problem with this idea of stages is that it is too amorphous. Since the age at which menopause begins varies from woman to woman, this would mean that a woman would be in early postmenopause at age 56.4, with the rest of her life being labeled "late postmenopause." Why does early postmenopause span only 5 years and why is postmenopause so long? Certainly, endocrine and tissue changes didn't suddenly become so different in 5 years to segue into late postmenopause. What of the changes that occurred during the 60s, 70s, 80s and beyond?

Just how long is postmenopause to be? It seems somewhat inappropriate to label someone of 80 or 90 as postmenopausal, although it is technically correct. But would it be correct to label a woman of 20, in her child-bearing

years, as premenopausal, although this is also technically correct?

Eskin and Troen's article entitled "Geripause: A Newly Defined Postmenopausal Phase"² offers a commendable answer to this question and is a good follow-up to the goal of STRAW. In their paper, and in a subsequent book,³ they have detailed the endocrinologic changes in particular, and changing chronic physical conditions in the postmenopausal period which, in their view, is from the menopause until about age 65. They then follow this postmenopause period with a period they term the "early geripause" (age 65 to age 85), and a subsequent period they label "late geripause" (age 85 onward). They also carefully detail the accompanying endocrine and progressive physiologic disabilities that occur with aging and are associated with their early and late geripause phases of reproductive aging. These are factors only briefly mentioned in the STRAW definitions of the postmenopausal periods of reproductive life.

Their effort is worthy and does offer an answer to the question of how long the later postmenopause periods are to be. However, the term "geripause" is an unfortunate one. It can easily be interpreted as a pause in geriatrics (aging). It is understandable that the authors were looking for a term that goes beyond the postmenopausal stage of life, with geriatric reproductive aging that does occur. Their description of early and late stages of geripause are also appropriate, but since they are describing the post-postmenopausal periods of reproductive aging, why not call them "early geriatric post-postmenopause" (EGPP, from 65 to 85 years) and "late geriatric post-postmenopause" (LGPP, 85+ years and older)? These would encompass only a change in terminology that would more accurately describe what both the STRAW study and Eskin and Troen have used for early and late postmenopausal stages.

Dealing with geriatric reproductive aging brings up several questions. It might be of interest to do a survey as to when physicians and women of various stages of reproductive and post-reproductive life feel that postmenopause

begins and ends, when aging (reproductive or otherwise) begins, and what phases or stages these encompass. There is also a question of whether this time of postmenopause or post-postmenopause is the domain of treatment by geriatricians or the newer field of geriatric gynecology. Does this mean that gynecologists will need to be board certified in this latter specialty to care for aging women?

In the scheme of things, reproductive aging—with its endocrinologic and tissue changes—is only a small part of geriatrics when dealing with the aging woman. But thanks to Eskin and Troen, we can now more accurately describe the changes that occur in what is postmenopause or post-postmenopause, whether we call it early or late geripause, or EGPP or LGPP.

—*Marcha Prottas Flint, PhD, PsyD*

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I favor adding the use of the term "geripause," as defined by Dr Bernard Eskin,¹ to the STRAW classification. Geripause describes the period of time that begins after the initial onset and early years of the menopause, which averages about 50 to 65 years of age. It continues through the later years of a woman's life, covering the late menopause (about 65 to 85 years of age) and the geriatric years or late geripause, beyond 85 years of age. The unique hormonal changes and the medical management of these time periods have already been well described by Dr Eskin. However, clinical care benefits for the benign gynecologic surgeon and the female pelvic reconstructive surgeon require a better and more complete understanding of the physiologic, structural and endocrinologic changes during these two unique time periods. Defining this phase of menopause can enable thorough evaluation of potential improvement in surgical outcomes.

According to the National Institute for Aging, the percentage of our female population

over age 65 will increase to 20% by 2030, and the percentage of women over age 85 will increase even more during this same time.² Several authors have predicted that the percentage of women who require pelvic reconstructive surgery in the early geripause will reach or exceed 30%³⁻⁶ and, as reported from the Women's Health Initiative, the demand for gynecologic services will increase 45% in the



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next 10 years.⁷ During this component of menopause, the early and late geripause, many of the most critical clinical changes and symptoms begin. These are the result of a complex tissue interaction affected by estrogen deficiency and aging combined. As described by Dr. Eskin, these also include endocrine,

physiologic and neurologic changes. The evidence of FSH and luteinizing hormone decreases from menopausal elevations predicates the changes for this age. The percentage of increase in osteoporosis, cardiovascular disease, arthritic problems and genitourinary conditions is also statistically significant.

Of particular interest to me are the sometimes dramatic changes centered in the pelvic structures. Pelvic relaxation and evident weaknesses are profoundly affected by the hormonal loss of estrogen maintenance, and by neurologic impairment and the marked loss in responsiveness on the part of aging cellular tissues. Surgical reconstruction of these tissues, which is almost always effective in young women with similar weaknesses, is particularly difficult and often unsuccessful in older women because of the tissue friability, loss of elasticity and healing inadequacies. Chronic diseases may also have a significant effect on tissue and organ prolapse. Tissues may weaken in response to increased abdominal pressure from obesity, chronic obstructive pulmonary disease, chronic cough or constipation. We should also be aware of and include the problems associated with other aging modifications and symptoms, which

may hamper anesthesia and recovery. This constellation of difficulties should be part of the anticipated problems that may occur during the early and late geripause, for which the appropriately educated geripause gynecologist would be prepared.

For the convenience of clinical and research observations, the geripause is divided into both an early (65 to 85 years) and a late (older than age 85) stage. In addition to the obvious research benefits this definition provides, use of these categories provides the gynecologist the opportunity to define the capability of the geripausal patient to tolerate major reconstructive surgery, elective surgery or even cosmetic procedures based on age-specific surgical data.

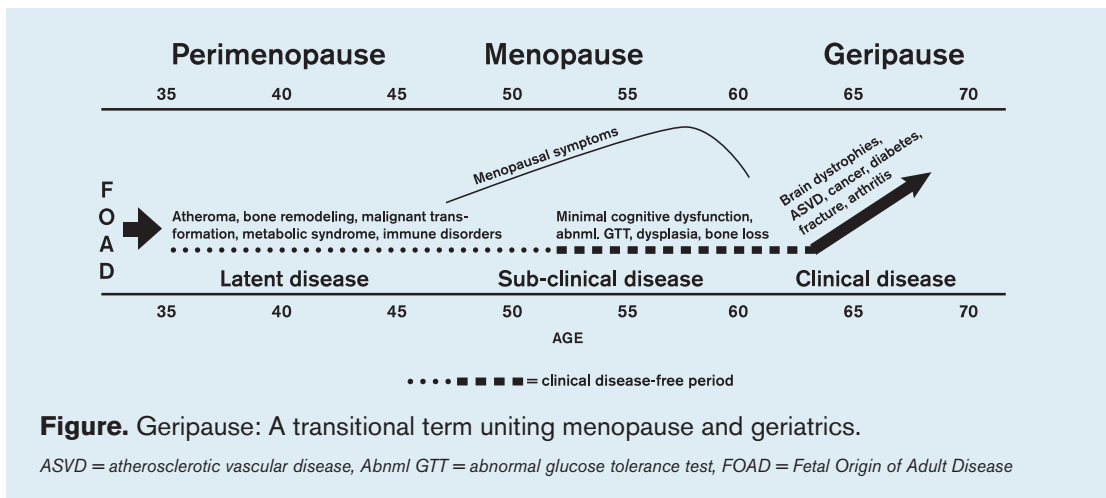
Employing the term geripause provides the practitioner and researcher with a newly defined age group from which the physiologic and medical changes in the menopausal patient can be patterned. Since there is a good deal of overlap possible, individuality in health status would also come into play. Under all circumstances this component allows new guidelines to be prepared and studied in trials for the anticipation of interventions of all kinds. This is a chance to begin an important step in providing menopause-related care to the increasing number of older women of today.

—Owen Montgomery, MD, FACOG

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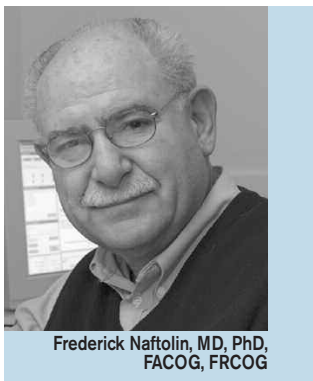
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The industrial revolution, widespread application of public health measures and antibiotics, and other by-products of our well-developed



cerebral cortex have resulted in the post-Darwinian period. Reproductive primacy of the fittest is no longer an issue of physical fitness. We are engaged in what some have termed “social evolution.”¹ People in all but the most undeveloped areas now escape death from acute illnesses (infection, hemorrhage and maternal-fetal death) to die at a later age and due to long-incubation (chronic) diseases such as cardiovascular disease, bone loss and brain dystrophies.

However, when women move into the post-reproductive period they commonly manifest maladaptive responses to decreased estrogen, which drive the development of long-incubation diseases.² Living to the post-reproductive years has become so certain that almost all women can expect it, and should take measures to prevent long-incubation diseases. Even so, the population of post-reproductive



individuals experiencing different degrees of ill-health is expected to double between 2000 and 2030.³

These issues have placed greater emphasis on prevention of disease. The extension of the interest of gynecologists into the prevention of long-incubation disease mandates reconsideration of the relationship between menopausal medicine and geriatrics.

Even before the need for these considerations became clear, Eskin coined the term “geripause,” which painted the postmenopausal period as far more protracted than was then understood.⁴ In preparing to write the foreword for his text, I discussed this word with Professor Eskin and decided to reserve judgment. I had concerns that this was too large a step to take and would complicate matters. I worried that while “geripause” spans the distance between the ages, it does not contain enough information to merit the homogenization of medical conditions before they are sufficiently understood. However, the need for a bridge-term between gynecology and geriatrics has become clearer with time. The two disciplines have to come together, and adoption of “geripause” can facilitate badly needed cross-fertilization. This concept is illustrated in the accompanying figure.

Geripause furnishes an important uniting function between menopause medicine and geriatrics. Professor Eskin deserves our thanks for furnishing such a useful term. All should work toward more complete integration of these two specialties.

—Frederick Naftolin, MD, PhD, FACOG, FRCOG

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