



CASE STUDY ON THE MANAGEMENT OF ELDERLY PATIENTS WITH GERIATRIC ANOREXIA ACCOMPANIED BY DECUBITUS ULCERS AND A HISTORY OF STROKE IN A BATANG DISTRICT HOSPITAL: A CLINICAL APPROACH AND MANAGEMENT WITH A LITERATURE REVIEW

Muhammad Hikmawan Priyanto^{1*}, Ibnu Mas'ud²

^{1*}General Practitioners, Batang District Hospital, Central Java. E-mail: hikmawanpriyanto01@gmail.com

²Internal Medicine Specialist, Batang District Hospital, Central Java.

***Corresponding Author:** Muhammad Hikmawan Priyanto

*General Practitioners, Batang District Hospital, Central Java. E-mail: hikmawanpriyanto01@gmail.com

ABSTRACT

BACKGROUND

Anorexia of Aging (AA) refers to the loss of appetite in the elderly caused by the aging process. Geriatric anorexia is a common syndrome that includes loss of appetite and related disorders, with serious impacts and increasing prevalence in the global elderly population. Many risk factors for geriatric anorexia can be modified through early detection and appropriate intervention, making it important not to consider it an inevitable condition in the aging process.

CASE PRESENTATION

A 72-year-old male presented to the emergency department with the main complaints of weakness for one week, refusal to eat and drink, and painful wounds in the mid-lumbar region. The working diagnosis for the patient was geriatric anorexia, decubitus ulcer in the sacral region, and a history of chronic cardiovascular disease (CVD). The patient was treated by an internist for his geriatric anorexia, referred to a surgeon for excisional debridement, and referred to a rehabilitation physician for infrared therapy, general passive range of motion (ROM), and mobilization. Other therapies included nursing care such as pain management, wound care, and nutritional care in the form of a soft low-carbohydrate diet. After 7 days, the patient was discharged with clinical improvement and education on follow-up care at home.

DISCUSSION

This case involves an elderly male with weakness, loss of appetite, and a diminished sense of taste for one week, as well as increasingly painful wounds in the lumbar region. The patient, who had a stroke three years ago, had been lying on a mattress and had a BMI of 17.9 (underweight). The causes of anorexia in the elderly are not fully understood but may involve hormonal changes, medication use, and social conditions. Early detection and prevention of anorexia are crucial to reduce morbidity and mortality, with screening tools such as the SNAQ that can be helpful.

The patient was treated by an internist with infusion therapy, injections, and a regular diet. Consultation with a surgeon was conducted to address the infection, and nursing care included monitoring vital signs, pain management, and activity motivation. A nutritionist provided a soft diet, and a rehabilitation physician conducted therapy and family education. Guidelines for managing anorexia in the elderly include food manipulation, assistance during meals, and socialization. Research on non-pharmacological interventions is still limited, and the role of caregivers is essential in recognizing and implementing care plans. This case demonstrates that geriatric anorexia, often starting from anorexia of aging, requires comprehensive intervention to prevent worsening conditions. Unfortunately, the patient could not be followed up in outpatient services.

CONCLUSION

Anorexia in the elderly is a geriatric syndrome caused by illness, medication side effects, or aging, resulting in decreased food intake, weight loss, and muscle mass, as well as increased risk of weakness. Management involves identifying risk factors, screening, and prompt intervention. In this case, anorexia was confirmed through SNAQ in a patient with stroke, decubitus ulcer infection, and weakness. Management requires intraprofessional collaboration to treat infections and prevent malnutrition.

KEYWORDS: Anorexia of Aging, Geriatric Anorexia, Decubitus Ulcer, Stroke, Geriatric Syndrome

BACKGROUND

Anorexia of Aging

Anorexia of Aging (AA) is a condition characterized by a natural decline in appetite in the elderly due to the aging process, not caused by any specific disease. This disorder is influenced by various physiological factors such as increased satiety hormones, chronic inflammation, and disturbances in gut microbiota, as well as psychological and social factors including decreased sensory function and changes in mental condition.(1)(2) The prevalence of AA varies depending on the environment, with higher rates in hospitals, followed by nursing homes, and the lowest in the community. This condition has the potential to cause various serious health problems in the elderly and can lead to weight loss, ultimately becoming a primary cause of frailty syndrome.(3)

Geriatric Anorexia

Geriatric anorexia (GA), first proposed by Morley and Silver in 1988, is an important clinical condition in the elderly characterized by a decrease in appetite and food intake, not merely a natural consequence of aging. This condition has serious impacts, including malnutrition, weight loss, sarcopenia, and loss of independence, with prevalence rates varying between 25-85% depending on background and individual conditions.(4) According to systematic literature research, it has been highlighted that more than one-fifth of the elderly population worldwide experiences anorexia in later life. This data underscores the urgency of achieving a global consensus on the diagnosis of AA to facilitate early identification and appropriate intervention, as well as to prevent adverse health impacts on the elderly population.(5)

As the global elderly population increases, GA is projected to become an even greater health challenge. The good news is that many risk factors for GA can be modified through early detection and appropriate intervention, making it important not to consider it an inevitable condition in the aging process. Therefore, prevention and early detection are crucial to prevent nutritional deficiencies and improve health. Although malnutrition and GA are often considered the same, it is important for physicians to distinguish between them, as some patients with GA may be at risk of malnutrition.(4) Anorexia of aging, which is often overlooked and considered normal, can progress to geriatric anorexia accompanied by already emerging impacts. This becomes a critical point leading to poor complications such as frailty. In this case study, we report and discuss the management of elderly

patients with geriatric anorexia accompanied by comorbidities from a clinical approach, along with a review of other literature.

CASE PRESENTATION

Anamnesis and Physical Examination

A 72-year-old male presented to the emergency department of Batang District Hospital with the main complaint of weakness for one week prior to hospital admission, refusing to eat and drink throughout the day due to a lack of appetite and a diminished sense of taste. The patient also reported a slight fever for the past two days. He had a painful wound in the mid-lumbar region that had been gradually enlarging and turning black, which the family had noticed for the past month. The patient was said to have been losing weight since suffering a stroke. He also had a cough, although infrequent and not bothersome, with no shortness of breath. There were no complaints regarding bowel or urinary habits. His medical history included stiffness and weakness in the right limbs due to a stroke approximately three years ago. He denied any history of treatment, including during the stroke. In terms of social habits, the patient had been lying on the mattress since the stroke and had not engaged in any activities other than resting in bed.

Upon admission, the patient was in fair condition with a conscious state of *compos mentis* and a pain scale of 5. His blood pressure was 145/95 mmHg, heart rate 75 beats per minute, respiratory rate 20 breaths per minute, body temperature 36.9°C, and oxygen saturation 99% without oxygen support. The patient's weight was approximately 50 kg with a height of about 167 cm, resulting in a BMI of 17.9, which is classified as underweight. Physical examination revealed abnormalities in the right limbs, with motor strength in the upper extremities rated 3/5 and in the lower extremities rated 1/5, showing stiffness in the lower extremities accompanied by slight swelling. The local status of the wound in the sacral area showed an ulcer with a black base and surrounding redness, approximately 5 cm in diameter, accompanied by larvae.

Supportive Medical Examinations

Initial supportive medical examinations were conducted in the emergency department, revealing abnormal leukocytosis of 15,360/uL (normal range: 3,800-10,600/uL) and mild anemia of 11.5 g/dL (normal range: 13.2-17.3 g/dL). The results of the echocardiogram were within normal limits. Other routine blood tests, kidney function, and random blood glucose levels were all within normal limits.

Diagnosis and Management

The patient was treated by an internist for geriatric anorexia, decubitus ulcer in the sacral region, and a history of chronic cardiovascular disease (CVD). The patient received the following therapies: intravenous fluid infusion of asering 500 cc every 8 hours, injection of ampicillin-sulbactam 1.5 g every 8 hours, injection of omeprazole 1 ampule every 24 hours, injection of mecobalamin 1 ampule every 24 hours, injection of ketorolac 1 ampule every 24 hours, injection of paracetamol 1 g every 8 hours, oral syrup of sucralfat 5 ml every 8 hours, and a regular diet of 1700 kcal.

Follow-up treatment in the ward

April 10, 2025	<ul style="list-style-type: none"> - Primary Care Physician (DPJP): Continuing therapy from the emergency department. - Nursing Care: Identify pain, teach pain management techniques, provide a comfortable position, monitor wound progression, assist with activities of daily living (ADL), train range of motion (ROM), motivate endurance activities, and perform repositioning involving the family. Nursing care will continue until the patient is discharged. - Nutritionist: The patient is at moderate risk of malnutrition with an intake of less than 70% related to physiological factors. A soft diet is provided with 3 main meals and 3 snacks via oral intake. Nutritional therapy will continue until the patient is discharged.
April 11, 2025	<ul style="list-style-type: none"> - Primary Care Physician (DPJP): Continuing therapy, consult with the surgical department. - Surgeon: Pro-excisional debridement.
April 12, 2025	<ul style="list-style-type: none"> - Patient planned for debridement tomorrow

April 13, 2025	- The patient underwent excisional debridement surgery.
April 14, 2025	<ul style="list-style-type: none"> - Primary Care Physician (DPJP): Therapy continued, check blood glucose at 06:00, oral furosemide 1x20 mg, infusion as needed, oral alprazolam 1x0.5 mg, consult with the rehabilitation medicine department. - Surgeon: Wound is good, medication with tulle, outpatient care is permitted. - Rehabilitation Medicine Physician: Right spastic hemiparesis with a history of neglected stroke, bilateral knee and ankle contractures. Planning to perform infrared therapy, general passive range of motion (ROM), mobilization, and educate the family to be actively involved. - Nursing Care: Post-operative wound care, continuing previous nursing care.
April 15, 2025	<ul style="list-style-type: none"> - No weakness, the patient is willing to eat and drink as usual, experiencing pain at the surgical site. - The decubitus ulcer is in good condition. - Blood glucose at 06:00 = 126 mg/dL. - Primary Care Physician (DPJP): Therapy continued, plan for discharge tomorrow.
April 16, 2025	<ul style="list-style-type: none"> - No weakness, appetite is present, the patient is willing to eat and drink, and pain at the surgical site has decreased. - Primary Care Physician (DPJP): The patient may be discharged.

The patient was treated for 7 days. The patient was discharged in a condition where appetite had returned, weakness had significantly decreased, movement of the legs and arms had started to improve, and the family was knowledgeable about caregiver responsibilities during home care. The patient was advised to follow up, but there has been no news since the patient was discharged.

DISCUSSION

Loss of appetite in the elderly is still poorly understood due to a lack of definitions and standard approaches. It is often considered a normal part of the aging process, with prevalence varying between 5% and 25% in the community, and can reach up to 85% in nursing homes and hospitals. However, it is difficult to determine accurate prevalence rates because loss of appetite is often undetected, especially if weight loss is not significant.(6) The number of cases is expected to continue to rise as the global population ages, thereby increasing the risk of anorexia in the elderly in the future.(7)

Clinical Approach

In our case, a 72-year-old elderly male was reported with the main complaints of weakness for 1 week, refusing to eat and drink throughout the day due to a lack of appetite and a bland taste. Additionally, the patient had a painful wound in the middle of the back that had gradually enlarged and turned black, which the family had noticed for the past month. The patient was said to have been losing weight since suffering a stroke. There were no complaints regarding bowel or urinary function. The medical history revealed that the right limbs were stiff and weak due to a stroke approximately 3 years ago. The patient denied any history of treatment, including during the stroke. For the time being, the patient had been lying on the bed since the stroke. Upon admission, the patient was in a fair condition with compos mentis consciousness and a pain scale of 5; vital signs were within normal limits, and the BMI was 17.9 (underweight).

Anorexia in the elderly is associated with various syndromes and effects resulting from the accumulation of health disorders in multiple body systems, making them more vulnerable to both internal and external stressors.(8) The causes of anorexia in the elderly are still not fully understood, but they likely involve changes in peripheral hormonal signals, chemosensory function, bowel movement, and sensory perception influenced by age, medication use, as well as social and environmental conditions.(4) A review stated that 81% of elderly individuals experiencing anorexia had identifiable causes, such as infections (22%), benign gastrointestinal disorders (16%), and heart disease (8%). Therefore, early detection and prevention (focusing on appetite rather than BMI) are crucial to reduce morbidity and mortality rates.(7)

Risk Factors for Geriatric Anorexia:

- 1) **Physical Factors:** Anorexia in the elderly is associated with physical disorders, such as mobility issues, vision and hearing problems, olfactory and gustatory impairments, as well as poor oral and dental conditions.(9)
- 2) **Medical Factors:** Chronic medical issues, such as COPD, Parkinson's disease, arthritis, and malabsorption syndrome, can reduce appetite and lead to unintentional weight loss. Hormonal changes can also affect brain function that regulates appetite and satiety.(10)
- 3) **Psychological Factors:** Conditions such as depression, dementia, and Alzheimer's disease can lead to anorexia. Additionally, polypharmacy in the elderly, due to the consumption of multiple medications, can cause anorexia, with some drugs like digoxin and NSAIDs as examples.(9)
- 4) **Social and Economic Factors:** Factors such as living alone and low-income status can contribute to anorexia. Social isolation is a significant contributing factor to this condition. A decline in psychological well-being also contributes to this condition, although not always.(9)(10)

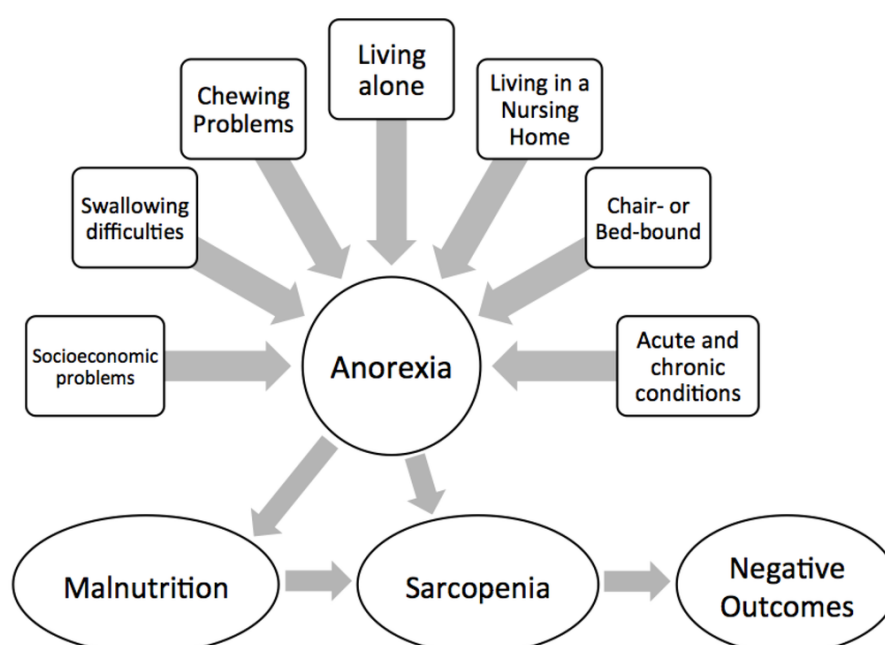


Figure 2. Risk factors for anorexia and their effects.(8)

Several medical conditions, such as cancer, COPD, stroke, abdominal angina, chronic constipation, and dementia, are closely associated with anorexia. Anorexia is more common in elderly individuals who are hospitalized and can be exacerbated by polypharmacy and recurrent hospitalizations, potentially leading to cachexia. Additionally, financial, social, and psychological factors, particularly depression, also contribute to protein/energy deficiencies in the elderly.(11) It is crucial to have screening tools/methods related to anorexia, especially in geriatrics.

Geriatric Anorexia Screening Tools

There are several screening tools to identify elderly individuals with anorexia or at risk of developing it, including:

- 1) **Simplified Nutritional Appetite Questionnaire (SNAQ):** This is a simple screening tool with good predictive ability for future weight loss and protein-energy malnutrition. A SNAQ score of ≤ 14 or ≤ 13 (in some studies) out of 20 serves as a threshold to define anorexia/loss of appetite.(8) The SNAQ questionnaire was developed to assess appetite in older individuals and has been shown to be reliable and valid as an appetite assessment tool for this population.(12)

My appetite is	a. Very poor b. poor c. average d. good e.very good
Food tastes	a. Very bad b. bad c. average d. good e. very good
When I eat	a. I feel full after eating only a few mouthfuls b. I feel full after eating about a third of a meal c. I feel full after eating over half a meal d. I feel full after eating most of the meal e. I hardly ever feel full
Normally I eat	a. Less than one meal a day b. One meal a day c. Two meals a day d. Three meals a day e. More than three meals a day

Simplified Nutritional Appetite Questionnaire (SNAQ)

Scoring: a=1, b=2, c=3, d=4, e=5. A score of ≤ 14 indicates significant risk of at least 5% weight loss within 6 months.

Figure 2. SNAQ screening.(13)

2) Functional Assessment of Anorexia/Cachexia Therapy (FAACT).

FAACT questionnaire can be used to recognize symptoms related to anorexia and assess the severity of each symptom with scores ranging from 0 (worse score) to 4 (better score). A score of 24 has been proposed as diagnostic for anorexia.(8) FAACT is often used in cancer patient samples, with FAACT scores and self-reported appetite assessments performing well when low food intake is used as a criterion measure, revealing a relationship between anorexia and BWL, which in turn is associated with the development of complications from cancer therapy.(14)

3) Mini Nutritional Assessment (MNA) or Mini Nutritional Assessment Short Form (MNA-SF)

Aging anorexia is defined based on the response to the first item in the Mini Nutritional Assessment tool: "Has your food intake decreased over the last 3 months due to loss of appetite, digestive problems, or difficulty chewing or swallowing?" Subjects reporting "severe/moderate decrease in food intake" are classified as having aging anorexia, while those reporting "no decrease in food intake" are classified as the non-anorexia group. The incidence of aging anorexia is defined as the evolution to a positive response at the 24-month visit (12 months after clinical assessment and biological sampling).(15)

The prevalence of malnutrition in hospitals or the risk of malnutrition in elderly patients is quite high (30–50%). The European Society for Parenteral and Enteral Nutrition (ESPEN) recommends the use of NRS 2002 and the Malnutrition Universal Screening Tool in the general population, while for the elderly population, ESPEN recommends the use of the Mini Nutritional Assessment (MNA) in both its full and short forms (MNA-SF). The MNA-SF is a valid instrument with good specificity and sensitivity for diagnosing malnutrition, and it is specific to the elderly population. The MNA uses 18 subjective and objective questions grouped into four categories: anthropometry, general assessment, nutritional assessment, and self-assessment, with a maximum score of 30, categorizing nutritional status as good, at risk of malnutrition, or malnutrition. The short version of the MNA (MNA-SF) was developed for low-risk patients, covering only six sections with a maximum score of 14.(16)

There are still several other screening tools, but these three are the most commonly used for screening anorexia in the elderly. Among all the screening tools/methods used, the most commonly used method for appetite assessment is the Simple Nutritional Appetite Questionnaire (SNAQ). The questions include: 1) My appetite is; 2) When I eat; 3) Food tastes; 4) Normally I eat.(6) In our case, the scores obtained were: My appetite is: 2; When I eat: 1; Food tastes: 3; Normally I eat: 1; with a total score of 7 out of 20. This indicates that the patient is experiencing anorexia, which is likely to lead to malnutrition if the anorexia condition is not managed.

Management And Treatment

The patient was treated by an internal medicine specialist for geriatric anorexia, sacral decubitus ulcer, and long-standing cardiovascular disease (CVD). The patient received therapy including: infusion of 500 cc every 8 hours, injection of ampicillin-sulbactam 1.5 g every 8 hours, injection of omeprazole 1 amp every 24 hours, injection of mecobalamin 1 amp every 24 hours, injection of ketorolac 1 amp every 8 hours, injection of paracetamol 1 g every 8 hours, oral syrup of sucralfate 5 ml every 8 hours, and a regular diet of 1700 kcal. During the treatment, the patient was consulted with a surgical specialist and underwent excisional debridement to address the infection. Nursing care was provided with monitoring of vital signs, pain identification and pain management techniques, assistance with activities of daily living (ADL), range of motion (ROM) exercises, motivation for gradual activity, repositioning, and family involvement. A nutritionist provided a soft diet with three main meals and three snacks via oral intake. Finally, the patient received treatment from a rehabilitation medicine specialist, which included infrared therapy, general passive ROM, mobilization, and family education to encourage active participation.

We adopted one of the guidelines that can be used to manage anorexia in the elderly, as follows:(9)

1) Food Manipulation

Serving a variety of delicious and aromatic foods can increase food intake by 13–26%. For elderly individuals with malnutrition or weight loss, dietary restrictions should not be too strict. For patients with gastroparesis, a low-fat and low-fiber diet with soft foods in small portions is recommended.(9)

2) Assistance During Meals

About 33% of adults aged ≥ 65 years require assistance with daily activities, including during meals. Caregivers should facilitate the eating process, such as cutting food and helping with eating utensils. Some patients, especially those with dementia or nearing the end of life, may require feeding tubes, but their preferences should be respected. Depression can reduce appetite in the elderly, so treating depression is important to prevent anorexia. Socializing during meals, such as family-style dining, can enhance appetite and quality of life. Some medications, such as anticholinergics and narcotics, can reduce appetite and slow digestion, while others like digoxin and metformin can cause malabsorption. It is important to consider changing or reducing the dosage of medications that contribute to anorexia. Additionally, medical conditions such as swallowing disorders and malabsorption syndrome can also lead to anorexia in the elderly.(9)

Multicomponent interventions are considered effective in managing anorexia, combining pharmacological and non-pharmacological approaches. Although there are currently no orexigenic drugs approved by the FDA or EMA, non-pharmacological interventions are a potentially effective alternative for increasing appetite and preventing malnutrition in the elderly. Research on non-pharmacological interventions is still limited, and it is important to consider the timing of interventions within a prevention framework: primary (risk of anorexia), secondary (anorexia itself), and tertiary (anorexia related to malnutrition). First-line strategies include nutritional education, food adjustments, and social-environmental approaches. Physical activity can also stimulate appetite. Secondary prevention involves nutrition counseling, while tertiary prevention includes nutritional interventions such as calorie-protein supplements. The role of caregivers is crucial in recognizing anorexia and implementing care plans.(17)

RELATED LITERATURE STUDY

We present several pieces of literature in the form of research related to anorexia and the screening process, as well as the outcomes thereafter.

1. A study conducted by Roger A. Fielding et al. (2023).

- This systematic review (SLR) shows that anorexia or loss of appetite in individuals aged ≥ 65 years is associated with an increased risk of adverse outcomes, such as malnutrition and mortality, in various settings, including the community, nursing homes, and inpatient care.

- This emphasizes the need for efforts to improve the detection, evaluation, and management of anorexia in older adults.
 - Barriers include the lack of standardized approaches for appetite assessment and the clear differences between anorexia and malnutrition.(6)
2. The second study was conducted by Reshma A. Merchant, J. Woo, and J.E. Morley (2022).
- Those who screen positive for Anorexia of Aging (AA) must first rule out underlying medical causes. Screening for AA should be a priority for every country, as appetite is a modifiable risk factor for healthy longevity.
 - Similar to other geriatric syndromes, current evidence indicates the need for individually targeted multicomponent interventions that need to be validated in large-scale studies.
 - Community screening and primary care can have a significant impact on population health and should be a core site for preventive health screening. Early identification of AA allows for timely interventions before the onset of weakness, sarcopenia, cachexia, and disability.(13)
3. The third study was conducted by Miho Yamamoto et al. (2024).
- This study successfully validated the SNAQ (Simplified Nutritional Appetite Questionnaire) as a tool for assessing anorexia in patients with acute stroke. The study involved 234 stroke patients treated within 48 hours after the stroke attack, with strict inclusion criteria. The results showed that SNAQ scores significantly correlated with various nutritional assessment indices and had an independent positive effect on motor function (FIM-motor). Therefore, assessing anorexia using SNAQ proved to be a valid measure of nutritional status and is important to evaluate in acute stroke patients, as it has an independent relationship with activities of daily living (ADL).(12)
4. Penelitian keempat oleh Alessio Molino et al (2021).
- This article discusses anorexia as a common symptom and a strong predictor of negative prognosis in patients with chronic diseases, including cancer. The study involved 438 cancer patients from 7 cancer centers in Europe and Central America. Initial results showed that the prevalence of anorexia varied depending on the assessment tool used, but all appetite tools showed good correlation when low food intake ($\leq 50\%$) was used as a criterion measure.
 - Overall, these findings underscore the importance of anorexia as a significant clinical indicator in cancer patients, with potential implications for further research and the development of more effective intervention strategies.(14)
5. The fifth study by Gaojie Feng et al. (2025).
- This study aimed to evaluate the effectiveness of dietary education and oral nutritional supplements (ONS) in addressing Anorexia of Aging (AA) in the elderly in China. The study involved 64 participants divided into an ONS group and a dietary education group. The Simplified Nutritional Appetite Questionnaire (SNAQ) was used to assess AA, with follow-ups at weeks 2, 4, 8, and 12.
 - The main results showed that both ONS and dietary education were effective in reducing Anorexia of Aging over a 12-week period, with ONS providing a faster effect. However, it is important to note that ONS did not show broad benefits on other health indicators such as weight and physical function.(18)
6. The sixth study by Annelies Somers et al. (2023).
- This study aimed to summarize the available evidence and develop guidelines in the form of a flowchart for evaluating anorexia in the elderly population. The method used was a systematic literature search involving keywords such as "elderly," "anorexia," "loss of appetite," "unintentional weight loss," and "diagnosis." A total of 25 relevant articles were included from an initial 619 results.
 - The results indicated that the management of unintentional weight loss generally begins with a detailed medical history and physical examination, followed by basic laboratory tests. It is important to consider medical, social, psychological, speech therapy (swallowing therapy), and neurocognitive aspects.(19)

From the various pieces of literature mentioned, anorexia occurring in the elderly/geriatric anorexia, which indirectly stems from aging anorexia, is a problem that must be addressed comprehensively, starting with identifying and recognizing the presence of anorexia as early as possible. In our case,

an elderly patient with a history of stroke as one of the causes (chronic disease) led to various factors causing a decrease in appetite, ultimately resulting in weakness syndrome. If comprehensive intervention and caregiver support are not provided in a timely manner, it is likely that the patient will deteriorate further. Unfortunately, our patient could no longer be followed up when receiving outpatient services.

CONCLUSION

Anorexia due to aging meets the criteria for geriatric syndrome. Loss of appetite in the elderly can be caused by illness, medication side effects, or the aging process itself. This condition results in decreased food intake, weight loss, and muscle mass (sarcopenia), as well as an increased risk of weakness, functional impairment, dependency, and decreased quality of life.

Geriatric anorexia requires a clinical approach that includes identifying risk factors, screening (such as SNAQ), and prompt management. In this patient, anorexia was confirmed through SNAQ with comorbid stroke leading to an infected decubitus ulcer, immobilization, and body weakness—forming a mutually exacerbating cycle.

Management requires intraprofessional collaboration, especially in comorbid patients. In our case, the focus was on treating the infection and providing care education to prevent further appetite decline, which could worsen malnutrition and the patient's condition.

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