

Development of an Assistance Protocol for the Systematized Approach to Pain in the Elderly

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Abstract

Objective: Pain is highly prevalent in elderly patients and requires a multidimensional and specific approach, which is often a significant challenge for healthcare professionals. Therefore, we propose the development of a protocol that summarizes the main steps for addressing pain in aging, aiming to facilitate and guide healthcare professionals to manage pain more effectively.

Methods: To systematically address pain in elderly patients, we formulated steps based on a theoretical framework and expert judgement in the area. A concise yet detailed protocol structure was developed for optimal pain management in the elderly. **Results:** A care-protocol structure was formulated ("CAT approach"), addressing 4 steps: characterization of the elderly patient, pain assessment and measurement, pain classification and its impacts, and treatment of pain.

Conclusion: The "CAT approach" provides a straightforward, detailed and systematic guideline to assist healthcare professionals in appropriately managing pain in the elderly.

Databases: LILACS, PubMed.

Keywords: Elderly; Pain; Pain measurement; Classification; Therapeutics.

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I. Introduction

The definition of pain is "an unpleasant sensitive and emotional experience, associated with, or similar to that associated with, actual or potential tissue injury."¹ Pain phenomenon is complex, and its proper approach requires the evaluation of its dimensions: physiological (semiological characteristics, among others); sensory-perceptive (intensity, quality); affective (anxiety, depression); cognitive (pain behaviors, acceptance of medication); psychosocial (interpersonal and familiar interaction, leisure) and sociocultural (ethnic, cultural and environmental factors).²

In the elderly population, the proper identification and evaluation of pain has its importance highlighted by the numerous implications on physical and psychosocial functions that pain exerts on these individuals, negatively impacting functionality, mood, cognition, risk of falls, and quality of life, which can lead to social isolation, dependence, and disability.³ The appropriate approach to pain in the elderly faces barriers from both patients themselves and healthcare professionals, leading to undertreatment. Patients often have the misconception that pain is inevitable and a natural part of the aging process; furthermore, sensory impairment, cognitive decline, and fear of drug addiction commonly cause elderly individuals to not report painful events, thus complicating pain assessment and management. As for healthcare professionals, there is often a lack of knowledge and formal pain assessment tools.⁴

The objective is to develop a practical protocol for a systematic approach to pain in elderly patients, focusing on individualized approaches that includes characterizing the elderly patient with pain, assessing and measuring pain, and providing appropriate pain management.

II. Methods

This is a methodological study which sought to develop a care protocol to address pain in the elderly, following three important steps: a) narrative review of the literature; b) theoretical structuring and organization, with discussions on relevant topics, such as: best ways to characterize the elderly, as well as the best tools to assess and measure pain in these individuals, and the best analgesic therapeutic guidelines; c) development of a systematic care protocol structure with sequential steps, followed by content validation (although subjective,

this validity is fundamental in the process of developing and adapting a measurement tool, as it evaluates the degree to which each element of a tool is relevant and representative of a specific construct with a particular assessment purpose).⁵

This research was approved by the Ethics and Research Committee of the Federal University of São Paulo (CAAE 63727022.4.0000.5505).

Step 1: Narrative literature review

A narrative literature review was conducted to analyze the available evidence on "pain management in elderly", with the aim of gathering and synthesizing results on the subject, presenting the state of the art evidence and facilitating the construction of knowledge for evidence-based clinical practice. Scientific articles were searched in indexed journals in the LILACS and PubMed databases using the keywords "Aged", "Pain Measurement", and "Pain Management". Inclusion criteria were publications between 2011 and December 2021, written in Portuguese or English, and available in full-text, resulting in 1835 articles. An exploration of the found material was carried out, which involved reading their "abstracts", and a total of 20 articles related to the topics of interest in this study were selected. The researchers read these articles in full and extracted the information deemed relevant.

Step 2: Theoretical structuring and organization

Knowledge was acquired and used as the basis for development of a care protocol to guide healthcare professionals to address pain in aging with more specific approach in elderly. It was selected some practical actions to guide the management of pain in aging, starting with characterization of the elderly patient affected, following the action regarding to assessment and measurement of pain, classification of pain and its impacts, and pain treatment (the latter mainly referring to general therapeutic orientations).

It was though in sequential steps named "CAT approach", acronym for the initials "C" referring to characterization of the elderly, "A" referring to assessment/measurement of pain and "T" referring to treatment of pain.

Characterization of the elderly with pain

Accurately defining the elderly patient with a pain complaint is mandatory for proper management of this individual. When characterizing it, we must go into detailed aspects of their functional capacity and domains.⁷

The concept of "functional capacity" encompasses every health-related attribute that allows an individual to be and do what they value the most, being thus determined by: (i) the intrinsic capacity (i.e., the compound of all physical and mental capacities of an individual), (ii) the environment (i.e., all the extrinsic world factors that forms the life-context of an individual), and (iii) the interaction between both. The level of frailty of an elderly person is closely related to the loss of his functional capacity. Several tools are available to detect frailty during clinical practice, such as the SOF Index, an instrument that uses very simple criteria with only three components: weight loss of 5% in two years, regardless of intention; inability to get up from a chair 5 times without using the arms; and the reduced level of energy, which can be identified through a negative answer to the question "Do you feel full of energy?". The individual is considered frail if two or three of these criteria are present; pre-frail if only one criteria is present; and robust if none of the criteria is present.⁸

Still about the characterization of the elderly, it is important to evaluate their ability to verbally communicate, as it directly interferes in pain assessment, measurement and treatment. Elderly patients without prejudice to verbally communication should be actively questioned about their pain symptoms, and self-reports of pain should always be gathered. For those with any difficulty in verbally communication, direct observation and reliable reports from caregivers are the best way to identify the presence of pain. Behavior evaluation may suggest the presence of pain, and the use of observational pain scales is helpful. It is important to emphasize that pain can manifest itself through disorientation, social isolation and apathy, even in those patients without any cognitive impairment.

Assessment and measurement of pain

During pain assessment, propaedeutic characteristics must be gathered, such as duration, location, onset, irradiation, extension, quality, triggering factors, mitigating or aggravating factors and associated factors. Additionally, it is necessary to inquire about previous pathologies, traumas, medications and the interference that pain may have in daily activities. Understanding patient's expectations about pain management, as well as any behavioral changes, is fundamental. To ease comprehension and to guide professionals, it is essential to evaluate different aspects of pain, such as temporality, frequency, pathophysiology, intensity and etiology. Still, it would be of great importance to address the impacts of pain in

patient's life, for example: functionality, sleep, social interaction, and affectivity. A thorough physical examination is also crucial, with inspection searching for antalgic position, deformity, misalignment, and atrophy; alongside with pain-site palpation, assessment of trigger, inflammation and contracture points, identification of sensitized deficit, muscle weakness, hyper or hyporeflexia.³

Following assessment, pain should also be measured, which allows proper quantification, a fundamental step in analgesic choice and therapeutic following.⁹ Pain measurements may be obtained through one-dimensional or multidimensional instruments.

One-dimensional instruments are those referring to pain intensity, such as the verbal and visual numeric scale, which have as advantage an easy and quick applicability, and also being reliable and viable to measure pain in elderly patients without cognitive impairment.¹⁰

In Brazil, a study with patients who are 80 years-old or more, identified that the preferred pain intensity measurement tools were the facial scale and visual numeric scale.¹⁰ In general, the verbal numeric scale is most commonly described as the preferred tool.¹¹ The scale is graded from 0 to 10, and classifies pain as weak when the score is less than or equal to 3; moderate when the score is 4 to 6; intense when the score is 7 to 9; and intolerable when the score is 10.¹²⁻¹³

Multidimensional pain measurement tools are used to measure not only intensity, but also other associated factors. These were designed for self-application, but may require a professional for better comprehension. In Brazil's reality, however, self-application is limited by the low educational level of the population. These instruments are not frequent in clinical practice, although they are of great importance for usage in the elderly population, as they are more specific to this age group in particular.

A multidimensional instrument called GPM (*Geriatric Pain Measurement*) was developed especially for the elderly, and sought to evaluate pain and its impacts mainly on functionality, mood, social engagement and quality of life. It is a tool already validated in Brazil, with easy understanding, but not so practical due to its 24 items.¹⁴ A short version of this tool with 8 items was recently validated to Brazil and proved to be very practical (GPM-P8). There are other instruments to be used such as the McGill Pain Questionnaire, which is a multidimensional tool already validated for the elderly in Brazil, but not developed specifically for this age group, on top of being difficult to use for clinical practice.¹⁵

Also, there are important tools which measure specific aspects of pain in the elderly, such as the IASID ("Instrument for the Evaluation of Sleep in the Elderly with Pain"); the GEAP-P ("Geriatric Emotional Assessment of Pain"); the IAPSI ("Instrument for the Evaluation of Social Participation of Elderly"); as well as the

PASS-20P ("Scale to Pain-induced anxiety") and the King's Parkinson-P ("King's Parkinson's Disease Pain Questionnaire"). Another available specific instrument is the "*Douleur Neuropathique en 4 Questions - DN4*" for neuropathic pain screening (general sensitivity of 82.6%). To neuropathic pain there are other tools, but the "DN4" is one of the most practical.¹⁶

For the elderly with verbally communication difficulties, such as those with severe dementia, also specific instruments are used to assess and measure pain. This kind of management takes place through indirect pain signals, such as facial expressions, moaning, posture, vocalizations, contractures, behavioral changes, among others. Recently the meta-instrument "Pain Intensity Measure for people with Dementia" (PIMD-P) was validated in Brazil. The tool works as an "*evaluation of evaluations*", i.e., a meta-instrument includes pre-existing indicators of behavioral observation of pain, associated with other important psychometric evaluations.¹⁵ The PIMD-Phas a very easy applicability (only 7 observational items). The PAIC-15 ("Pain Assessment in Impaired Cognition")¹⁷, another meta-instrument to evaluate pain in the elderly experiencing difficulty in verbal communication is also being proposed in Brazil (in process of Brazilian validation).

Classifications of pain and its impacts

Before pain treatment, it is fundamental to obtain classifications of pain and its impacts, which can greatly help in therapeutic planning.

The following classifications of pain were suggested: regarding temporality (acute or chronic); frequency (continuous or intermittent as incidental, end-of-dose failure, breakthrough pain); and pathophysiology (neuropathic, nociplastic, nociceptive or mixed). Also, it were suggested to classify the pain according to its etiology and a didactic way to this, an interesting table of pain etiologies suggested by *Eriksen and Ringe* (regarding to bone marrow lesions) was adapted.¹⁸

Of equal importance, it were very recommended to classify the intensity of pain into mild, moderate, intense and unbearable intensity. Another way to classify the pain intensity involve numbers from 0 to 10. Also, it was very suggested to classify the impacts of pain as impacts to multidomains (mainly to functionality); social participation, sleep and mood (the latter referring to pain-induced depression and pain-induced anxiety).

Treatment of pain

Pain treatment in aging is challenging and requires a multi and interdisciplinary intervention, as well as a multimodal approach, based on the biopsychosocial pain model. Therefore, the optimal analgesic therapy includes various healthcare professionals, such as physiotherapists, physical educators, acupuncturists, music therapists, nurses, occupational therapists, and psychologists, among others.

Here, it was suggested to including into protocol general orientations to treatment of pain in elderly.

Before an analgesic therapeutic planning, it is important to address some general issues, for example, existing barriers and expectations alignment regarding pain treatment. Also, understanding the patient's main needs and expectations is crucial, alongside with clarification of limitations and difficulties to be faced, always providing a clear and proper communication. This way, frustrations and conflicts between professionals, patients and their families can be avoided.

Other important aspects of general therapeutic orientations are the "Principles of pain control" advocated by the *WHO* (World Health Organization): by the clock; by the mouth; by the ladder; for the individual; use of adjuvants; attention to detail.¹⁹

When initiating the analgesic therapeutic planning itself, it is important to associate non-pharmacological measures, which are of great importance in these situations. Among others, the "self-management of pain" stands out, which includes not only pain education, but also training to identify and modify negative thoughts, goal-setting, guidance on exercises and physical therapies, all aiming at improving pain, mood and psychosocial functioning. Still, there are others noteworthy non-pharmacological therapies, such as occupational therapy, psychotherapy, physiotherapy, music therapy, and others.

As of the pharmacological approach, it is initially suggested to carefully review previous pathologies and regular medications of each patient, taking into account the pharmacokinetic and pharmacodynamic changes that occur in aging, in order to use the most appropriate drugs with reduced risk of adverse effects.

It was suggested a therapeutic arsenal including non-opioids, opioids and adjuvant drugs chosen based on some aspects of pain and of the patient, preferably in combination (multimodal approach). The use of opioids in the elderly should follow the "T Rule" (Titration, Tweaking and Transition), allowing a highly individualized and dynamic opioid-based therapy.²¹ Adjuvant drugs are also strongly recommended to enhance pain control when associated with analgesics. However, polypharmacy, which is such a frequent condition in geriatrics, is a key factor to be taken into account as well, differentiating between "bad polypharmacy of the elderly" and

"rational polypharmacy of pain", the latter referring to drug combinations in lower doses, higher effectiveness and fewer adverse effects.²²

Step 3: Development of a care protocol and its content validation.

Intentionally to provide better guidance for the approach to pain in the elderly, and based on the knowledge acquired from the scientific review and based on structuring and organizing of actions, a systematic care-protocol with 4 sequential steps was developed. Named it "Practical protocol to address and to classify the pain and its impacts in the elderly - CAT approach".

It was also obtained a content validation that consists of judging to what extent the selected items for measuring a theoretical construct accurately represents all the important points of the concept to be measured. The developed protocol was submitted to evaluation of a judging committee composed of experts selected and invited by the authors, from different healthcare areas: medicine (8 geriatricians and 1 pain specialist physician), physiotherapy (1) and nurse (1). These individuals had a lot of experience in elderly care and also with pain management. The invitation was sent individually by e-mail, containing only the name of a sender and the name of the recipient, in order to prevent identification. This invitation contained research data and some information like time and location to a single meeting when the experts actively and collectively would participate in judging relevant information for a care-protocol.

At first, it was elaborated a structure to a care protocol encompassing contents considered essential for appropriate approach to pain in the elderly. After, this protocol was evaluated by invited experts who analyzed aspects such as relevance of the involved questions, clarity, objectivity, simplicity, feasibility and accuracy. The structure of the protocol was reformulated based on judges' suggestions in order to make it practical and consistent to evidences extracted from the scientific literature about the thematic proposed. To obtain a content validity a consensus with a minimum agreement of 80 percent of the judged criteria was intended.

III. Results

A systematic and specific care protocol was developed to address to pain in elderly

–“CAT Approach” (Figure 1 - English / Figure 2 - Portuguese). This presented a simple but detailed structure including key points for an appropriate approach to pain in elderly. The protocol was structured in 4 steps: characterization of the elderly patient, assessment and measurement of pain, classification of pain and its impacts, and treatment of pain.

The committee of invited experts evaluated whether the content of the protocol achieved its objectives, mainly clarity, understanding and practicality. A consensus with a minimum agreement of 80 percent of the judged criteria was achieved.

For the next, it follows the proposed four steps to the CAT protocol:

Step 1: Characterization of the Elderly Patient

Judged as the first step towards pain management in aging. Two important aspects established to characterize of the elderly patient, the first referring to her vulnerability, thus classifying the aged as robust, pre-frail/frailty risk or frail, and the second referring to her ability to verbally communicate, defining the patient as capable or incapable to verbally communicate.

Step 2: Assessment and measurement of pain

Two major aspects were established in this step. The first one being the pain assessment through a specific anamnesis, a physical examination and complementary tests if necessary. Pain-related semiological characteristics should be well contemplated, such as location, onset, duration, irradiation, frequency, and improving/worsening factors. And the second aspect referred to pain measurement, including intensity and its impacts which are also important for pain management. One-dimensional and multidimensional instruments are suggested for these.

To obtain the intensity of pain, the use of scales of good understanding by the elderly is recommended, such as verbal numeric and facial scale. To assess and measure several dimensions of pain, specific instruments are available, among them: GPM-P8 (multidimensional/functional), IAPSI (social participation), IASID (sleep), GEAP-P (pain-induced depression), PASS-20P (pain-induced anxiety), and King-Parkinson P (Parkinson's Disease-related pain).

For non-verbally communicative patients, the use of specific and practical instruments were advocated. The PIMD-P were particularly suggested, but others such as PASCLAC-P, PAINAID, and PAIC-15 also were suggested.

Step 3: Classification of pain and its impacts

By following the previous steps, it was recommended to healthcare professional to classify the pain in a practical way. Here, the following pain classifications were considered: regarding its temporality (acute or chronic), frequency (continuous or intermittent - incidental, end-of-dose failure, breakthrough pain), and pathophysiology (neuropathic, nociplastic, nociceptive or mixed). Additionally, etiological classification was included in a didactic way: traumatic/mechanical overload/muscular disorder, degenerative, inflammatory, infectious, ischemic, metabolic, oncological, iatrogenic and idiopathic.

Moreover, guidance to evaluate the pain intensities, its classification and impacts were also included. To impacts of pain was suggested to obtain them as multidomain/functional, social, sleep, pain-induced depression and pain-induced anxiety.

Step 4: Treatment of pain

To this final step was proposed general therapeutic orientations (not specifically referring to treatments themselves), such as non-pharmacological and pharmacological therapies, as well as minimally invasive and surgical therapies. Here, also including important aspects as aligning patients' expectations, facing barriers and employing interdisciplinary, multidisciplinary and multimodal analgesic therapies.

Regarding to non-pharmacological treatment in the elderly emphasized educational programs and pain self-management, as well as complementary therapies, which are necessary for patients' rehabilitation, as acupuncture, physiotherapy, psychotherapy, occupational therapy, music therapy, among others. And referring to pharmacological analgesic treatment, the cornerstone of analgesic treatment described classes of drugs as non-opioids, opioids and adjuvant drugs. Minimally invasive and surgical treatments should be considered for difficult-to-control painful conditions.

Development of an Assistance Protocol for the Systematized Approach to Pain in the Elderly

PROTOCOLO PRÁTICO PARA ABORDAR E CLASSIFICAR A DOR E SEUS IMPACTOS NO IDOSO - "ABORDAGEM CAT"			
Passo1: Caracterizar o Idoso	Passo2: Avaliar Mensurando a Dor	Passo3: Classificação Geral e dos Impactos da Dor	Passo4: Tratar a Dor
Quanto à vulnerabilidade	Avaliação	Classificação algica	Orientação geral
<ul style="list-style-type: none"> • Robusto • Pré-frágil / Risco de fragilização • Frágil 	<ul style="list-style-type: none"> • Anamnese • Exame físico • Exames complementares, se necessários 	<ul style="list-style-type: none"> • Temporalidade <ul style="list-style-type: none"> - Aguda - Crônica • Frequência <ul style="list-style-type: none"> - Contínua - Intermitente - Episódica (incidental, início no "fim de dose", irruptiva) • Fisiopatologia <ul style="list-style-type: none"> - Neuropática - Nociceptiva - Nociplástica - Mista • Etiologia <ul style="list-style-type: none"> - Degenerativa - Oncológica - Inflamatória - Iatrogênica - Infecçiosa - Idiopática - Isquêmica - Metabólica - Trauma • Intensidade <ul style="list-style-type: none"> - Leve - Intensa - Moderada - Insuportável • Impactos <ul style="list-style-type: none"> - Múltiplos domínios/Funcional - Sono - Social - Ansiedade - Depressão 	<ul style="list-style-type: none"> • Alinhamento de expectativas • Enfrentamento de barreiras • Terapêutica inter/multidisciplinar e multimodal • Princípios do controle algico: por boca; por relógio, pela escada; para o indivíduo; uso de adjuvante; atenção aos detalhes
Quanto à comunicação verbal	Mensuração		Terapêutica não farmacológica
<ul style="list-style-type: none"> • Capaz de comunicar-se • Incapaz de comunicar-se 	<ul style="list-style-type: none"> • Instrumentos Unidimensionais (Intensidade) <ul style="list-style-type: none"> - Escala numérica visual e verbal - Escala de faces, Escala visual analógica - Escala de descritor verbal... • Instrumentos Multidimensionais / Específicos <ul style="list-style-type: none"> - Dor neuropática: DN4 - Múltiplos domínios/Funcional: GPM-P - Social: IAPSI - Depressão: GEAP - Sono: IASID - Ansiedade: PASS-20P - Dor na D. Parkinson: King-P • Instrumentos para incapazes de comunicar-se verbalmente <ul style="list-style-type: none"> - PIMD - PAIC-15 - PACSLAC, PAINAD... 		<ul style="list-style-type: none"> • Programa educacional • Autogerenciamento da dor • Psicoterapia • Acupuntura • Fisioterapia • Terapia ocupacional, etc.
			Terapêutica farmacológica
			<ul style="list-style-type: none"> • Analgésicos não opioides • Analgésicos opioides (regra dos "3T") • Adjuvantes
			Terapêuticas minimamente invasiva e cirúrgica

QUADRO 1: PROTOCOLO PRÁTICO PARA ABORDAR E CLASSIFICAR A DOR E SEUS IMPACTOS NO IDOSO - "ABORDAGEM CAT"

PRACTICAL PROTOCOL TO ADDRESS AND CLASSIFY PAIN AND ITS IMPACTS IN THE ELDERLY - "CAT APPROACH"			
Step 1: Characterizing the elderly	Step 2: Pain assessment and measurement	Step 3: Pain classification and its impacts	Step 4: Pain management
As for vulnerability	Assessment	Pain classification	General guidance
<ul style="list-style-type: none"> • Robust • Pre-frail / Frail risk • Frail 	<ul style="list-style-type: none"> • Anamnesis • Physical examination • Complementary exams, if necessary 	<ul style="list-style-type: none"> • Temporality <ul style="list-style-type: none"> - Acute - Chronic • Frequency <ul style="list-style-type: none"> - Continuous - Intermittent - Episodic (incidental, end-of-dose related pain, breakthrough pain) • Pathophysiology <ul style="list-style-type: none"> - Neuropathic - Nociceptive - Nociplastic - Mixed • Etiology <ul style="list-style-type: none"> - Degenerative - Oncology - Inflammatory - Iatrogenic - Infectious - Idiopathic - Ischemic - Metabolic - Trauma • Intensity <ul style="list-style-type: none"> - Mild - Intense - Moderate - Unbearable • Impacts <ul style="list-style-type: none"> - Multiple domain/Functional - Sleep - Social - Anxiety - Depression 	<ul style="list-style-type: none"> • Expectations alignment • Overcoming barriers • Inter/multidisciplinary and multimodal therapy • Principles of pain control: by the mouth; by the clock; by the ladder; for the individual; use of adjuvant; attention to detail
As for verbal communication	Measurement		Non-pharmacological therapy
<ul style="list-style-type: none"> • Able to communicate • Unable to communicate 	<ul style="list-style-type: none"> • One-dimensional Instruments (Intensity) <ul style="list-style-type: none"> - Visual and verbal numeric scale - Face scale, visual analog scale - Verbal descriptor scale... • Multidimensional / Specific Instruments <ul style="list-style-type: none"> - Neuropathic pain: DN4 - Multiple domain/functional: GPM-P - Social: IAPSI - Depression: GEAP - Sleep: IASID - Anxiety: PASS-20P - Parkinson's Disease-related pain: King-P • Instruments for non-verbally communicative patients <ul style="list-style-type: none"> - PIMD - PAIC-15 - PACSLAC, PAINAD... 		<ul style="list-style-type: none"> • Pain self-management • Psychotherapy • Acupuncture • Physiotherapy • Occupational therapy, etc.
			Pharmacological therapy
			<ul style="list-style-type: none"> • Non-opioid analgesics • Opioid analgesics ("3T" rule) • Adjuvant drugs
			Minimally Invasive and surgical therapies

TABLE 1: PRACTICAL PROTOCOL TO ADDRESS AND CLASSIFY PAIN AND ITS IMPACTS IN THE ELDERLY - "CAT APPROACH"

IV. Discussion

Addressing pain in the elderly is very challenging for healthcare professionals because there are several involved factors and among these the lack of specific knowledge on pain in aging, fear of prescribing opioids and anti-inflammatories, lack of skill and insufficient time for this type of assessment.³ Additionally, there are barriers to approach the pain in the elderly such as impaired verbal communication (very often in cognitive and sensory disorders); senescence physiological alterations; and stigmas like misconception that pain is inherent to the aging process itself.

Specific protocols on approach the pain in the geriatric population are scarce, with only general guidance available about assessment/measurement and treatment of pain in the elderly.¹⁹ However, these guidelines are not present in a practical and protocol-based manner, nor are they based on good evidence, generally developed in accordance to local reality and professional experience.

Some validated protocols also made by specialists constitute to use in clinical practice and also instruments to evaluate the pain have been developed. However, it is considered very importantly that these to be specific for the elderly, comprehending various different aspects of their pain. Elderlies with dementia and impaired communication skills must be approached individually, otherwise pain can have undesired consequences, such as sleep disturbances, loss of appetite, agitation, aggressiveness, impaired functionality and social isolation.²²

All the instruments suggested to the “CAT approach” are not just specific and practical, but facilitate the pain management in geriatric. Is very important to use specific instruments in elderly people.²³ The “CAT approach” contemplates different aspects of pain management in aging in order to help the clinical practice. Four important steps to management of pain in aging were suggested in that process: characterization of the elderly patient, assessment/measurement of pain, to classifications of pain and its impacts, and treatment of pain.

Here, it was also recommended to assess the level of frailty of the elderly patient. The appearance or disappearance of the factors that make up the frailty phenotype criteria allow the individuals to transit between their levels throughout life, becoming more or less frail, and some aging factors contribute to this transition like the pain. In addition, there is a concept called “pain homeostasis” that has been proposed to explain the association between frailty and pain and in this concept a recurrent and persistent pain cause disturbances as insomnia, decreased food/nutrients intake and locomotor difficulties, all known factors that reduce physiological reserves, increasing the likelihood of cognitive impairment, falls and functional disability.^{22,24} The analgesic drugs are related to frailty status too. Elderly patients use more analgesics as their level of frailty progresses, and the regular use of these drugs is commonly related to more advanced frailty levels.²⁵ In other words, associations are proven and it means the more analgesics has used the more frailty. Referring to classify the pain and its impacts these help the therapeutic planning in pain. It is important to determine the basic mechanisms that contribute to the onset of a painful experience in order to adapt to therapeutic actions.²⁶ Also, the pain is closely related to impaired the sleep quality, mood, and social interaction, which can lead to physical and functional disability, thus is important pay attention to such situations in pain management.²⁷ Regarding suggestions for guidance to treatment of pain in aged individuals, attention was drawn to aspects of aligning patients' expectations, coping with barriers and the use of interdisciplinary, multidisciplinary and multimodal analgesic therapies. The biopsychosocial nature of pain lead to intense physical and psychological suffering, thus it emphasizes the importance of an adequate therapeutic planning. Considering a limitation of this study were the lack of other psychometric validations to the protocol as clinical validation. Hence, it would be important for future studies address the “CAT approach” in real-world clinical practice, thus could point out to needs for any eventual adjustments.

V. Conclusion

A systematic and straightforward care protocol was developed to address pain in the elderly, the “CAT approach”. It contemplates important and specific sequential steps to guide adequate approaches to pain in aging.

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