

Mental health aspects and the doctor-patient relationship do matter in the management of refractory chronic pain

João Paulo Consentino Solano^{1,2}  José Eduardo Guimarães Pereira³  Rayane da Silva Souza Barbosa⁴  Hazem Adel Ashmawi^{5,6} 

¹Professor de Psiquiatria, Curso de Medicina, Centro Universitário São Camilo – CUSC. São Paulo/SP, Brasil.

²Docente colaborador do programa de Educação Continuada em Fisiopatologia e Terapêutica da Dor, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo – FMUSP. São Paulo/SP, Brasil.

³Anestesiologista, Hospital Central do Exército e Hospital Unimed. Volta Redonda/RJ, Brasil.

⁴Anestesiologista, Faculdade de Medicina da Universidade de São Paulo – FMUSP. São Paulo/SP, Brasil.

⁵Anestesiologista, Faculdade de Ciências Médicas da Universidade Estadual de Campinas – UNICAMP. Campinas/SP, Brasil.

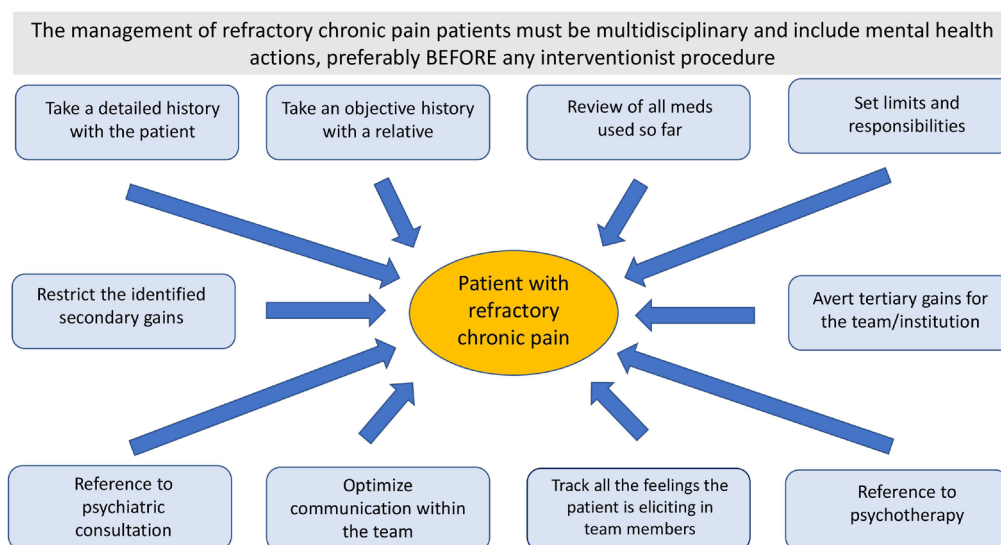
⁶Supervisor da Equipe de Controle de Dor, Divisão de Anestesia, Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo – FMUSP. São Paulo/SP, Brasil.

E-mail: joao.solano@prof.saocamilo-sp.br

Highlights

- Review the medical history and conduct an objective anamnesis (with a family member).
- Take inventory of all medications previously used by the patient.
- Set boundaries and reinforce the patient's responsibility for their treatment
- Identify and manage secondary gains, as well as address tertiary gain.
- Optimize communication and monitor the feelings the case elicits in the care team.
- Refer the patient for mental health evaluations (psychiatry and psychology).

Graphical Abstract



Abstract

Chronic non-cancer pain (CNCP) is among the clinical conditions that most challenge curative medicine due to its high therapeutic failure rates. In many cases, pain management teams are unable to identify a clear organic cause for the pain condition; in others, an etiological factor is found that can be attributed to the condition, but it is recognized, either promptly or after some years, that this organic substrate is insufficient to sustain the patient's suffering for such a prolonged period; finally, there are cases in which the presumed organic cause of pain is corrected, yet the patient does not improve or does not improve as expected. The aim of this paper is to present a literature review on mental health aspects and the doctor-patient relationship involved in the management of patients with refractory CNCP. A systematic search and literature review methodology was employed, using the descriptors *intractable pain*, *pain management*, *medical history*, *medication review*, *physician-patient relationship*, and *mental health evaluation* in the Cochrane Central, PubMed, and LILACS databases, with no restrictions regarding study design, language, or publication date. Ten suggestions are presented as a result of the analysis of the included articles and the authors' experience, some related to the semiological approach and others to the therapeutic follow-up of patients with CNCP. The suggestions presented may be useful in the management of refractory CNCP cases and should preferably be implemented before indicating invasive procedures.

Keywords: Intractable Pain. Medical History Taking. Physician-Patient Relations. Psychiatry. Clinical Psychology.

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INTRODUCTION

Chronic pain is among the most difficult medical conditions to treat, particularly chronic non-cancer pain (CNCP) for which no clear organic cause can be identified. Patients with CNCP often spend years searching, unsuccessfully, for a treatment that will resolve their suffering. Frequently, medicine identifies an etiological factor to which the pain can be attributed, but it becomes clear that such an organic substrate is insufficient to sustain the patient's suffering over an extended period. In other cases, medicine manages to correct the presumed organic cause of the pain, yet the patient does not improve, or does not improve to the expected extent. Over the course of medical history, the situation has evolved so unfavorably that CNCP is often considered a nosological entity without an adequate treatment, leaving patients to accept their condition, alleviate suffering as much as possible, and manage its secondary limitations¹.

When pain management teams are faced with refractory CNCP cases, it is common to raise the hypothesis that psychological or psychiatric factors may be contributing to the condition. The most recent definition of pain by the International Association for the Study of Pain (IASP) points to such a possibility: "pain is an unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage"². The change from "associated with" (the previous IASP definition) to "resembling that associated with" encompasses the entirety of the psychic experience of the subject experiencing pain, as it is this subject who determines what resembles an experience associated with actual or potential damage to their tissues. Such determination can only be made based on the subject's own previous experiences, expectations, memories, emotions, and life learning^{3,4}.

The recent conceptualization of the nociplastic pain mechanism, introduced by the IASP in 2017,

also highlights the need to recognize and manage patients who report painful experiences even in the absence of disease or somatosensory system injury that could materially justify the pain. The concept defines nociplastic pain as "pain that arises from altered nociception despite no clear evidence of actual or threatened tissue damage causing the activation of peripheral nociceptors or evidence for disease or lesion of the somatosensory system causing the pain"⁵. While the concept may appear novel, medicine has for decades drawn attention to the existence of such patients, albeit under different terms, such as functional pain, pain modulated by central sensitization mechanisms, or psychogenic pain, consistently attempting to describe conditions whose explanatory mechanisms are far less physical and bodily (as in nociceptive and neuropathic pain) and much more related to intangible factors, such as psychic, social, and existential dimensions.

Patients with pain refractory to conventional pharmacological treatment are often referred for interventional procedures to manage their condition. Unfortunately, the success rate of such interventional measures is highly variable⁶, and often, only after their failure is it considered that psychological or psychiatric factors may be so deeply interwoven into the case that they may have doomed the therapeutic strategy to ineffectiveness.

This article presents suggestions related to mental health aspects and the doctor-patient relationship that deserve consideration in the management of patients with CNCP, especially in refractory cases (in which conventional pharmacological treatment has proved ineffective), and preferably before recommending an interventional procedure. Based on a systematic search and literature review, these suggestions are presented in the form of a review that also incorporates the experience of a multidisciplinary team in the clinical management of patients with refractory chronic pain.

METHODOLOGY

To include various study designs, the method of systematic literature search followed by review was chosen, as described by Grant and Booth⁷. The search, screening, selection, and inclusion of articles followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) protocol⁸.

Data sources and search strategy

An electronic literature search was conducted using the following databases: The Cochrane Central Register of Controlled Trials (CENTRAL, 2024), PubMed (Ovid SP, 1966–2024), and Latin America and the Caribbean Literature on Health Sciences (LILACS, 1982–2024). One of the authors (JP) carried out the systematic searches on August 22, 2024. Multiple

combinations of the following descriptors were used: “pain”, “pain management”, “medical history”, “medication review”, “physician-patient relationship”, and “mental health evaluation”. No restrictions were applied regarding study design, language, or publication date.

Inclusion criteria

Articles were eligible for inclusion, after screening titles and abstracts, if they addressed to the non-pharmacological clinical management of adult patients (aged 18 or older) with CNCP and reported on aspects of mental health (including treatments involving psychiatrists or psychologists) or the doctor-patient relationship (including the anamnesis procedure).

Exclusion criteria

During the screening of titles and abstracts, articles were excluded if they reported on cancer-related pain, acute pain (e.g., postoperative), physical therapy or physiatric interventions, invasive procedures, the development or validation of scales, or if they focused on drug investigation or pharmacological treat-

ment outcomes.

Article selection

Two other authors (JS and RB) independently screened the references by reading their titles and abstracts, retrieved full texts of potentially eligible studies, and analyzed them for possible inclusion. Discrepancies between their lists were resolved by consensus whenever possible. Another author (HA) served as adjudicator when consensus was not reached, proposing the final list of references. Some of the included articles had their reference lists checked to assess the eligibility of additional sources for possible inclusion.

Data extraction and synthesis

Studies that reported an intervention had the following information extracted and summarized in a table: first author, year of publication; study design; objectives; clinical diagnosis of samples/populations; interventions; findings; reported limitations. Studies that did not report interventions are presented only throughout the text.

RESULTS

Table 1 displays the systematic search method used across electronic databases. The systematic literature search yielded 926 references. Figure 1 shows the flow-chart of article selection, from identification to inclusion, based on the PRISMA protocol⁸. Table 2 presents the 14 articles that were included. Of these, four were inter-

vention studies (two pre-post analyses, one randomized controlled trial, and one uncontrolled trial); three were case reports or case series, three narrative reviews, one cross-sectional study, one debate article, one qualitative study, and one letter to the editor (reporting data from a review).

Table 1 - Search strategy in the PubMed database. São Paulo, 2024.

<p>Intractable pain and history taking ((Pain, Intractable OR Intractable Pain OR Intractable Pains OR Pains, Intractable OR Refractory Pain OR Pain, Refractory OR Pains, Refractory OR Refractory Pains) AND (medical history taking OR History Taking, Medical OR Family Medical History OR Family Medical Histories OR Medical History, Family OR Past Medical History, Family OR Family History, Medical OR Medical Family Histories OR Medical Family History OR Family History, Health OR Health Family Histories OR Health Family History OR Family Health History OR Family Health Histories OR Health History, Family OR Previous Medical History OR Medical History, Previous OR History, Previous Medical OR Medical Histories, Previous OR Previous Medical Histories)) NOT (neoplasms OR Tumors OR Neoplasia OR Neoplasias OR Neoplasm OR Tumor OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Neoplasms, Benign)</p>
<p>Intractable pain and management ((Pain, Intractable OR Intractable Pain OR Intractable Pains OR Pains, Intractable OR Refractory Pain OR Pain, Refractory OR Pains, Refractory OR Refractory Pains) AND (Pain management OR Management, Pain OR Managements, Pain OR Pain Managements)) NOT (neoplasms OR Tumors OR Neoplasia OR Neoplasias OR Neoplasm OR Tumor OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Neoplasms, Benign)</p>
<p>Intractable pain and medication review ((Pain, Intractable OR Intractable Pain OR Intractable Pains OR Pains, Intractable OR Refractory Pain OR Pain, Refractory OR Pains, Refractory OR Refractory Pains) AND (Medication Reviews OR Review, Medication OR Reviews, Medication)) NOT (neoplasms OR Tumors OR Neoplasia OR Neoplasias OR Neoplasm OR Tumor OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Neoplasms, Benign)</p>

to be continued...

Intractable pain and mental health evaluation

((Pain, Intractable OR Intractable Pain OR Intractable Pains OR Pains, Intractable OR Refractory Pain OR Pain, Refractory OR Pains, Refractory OR Refractory Pains) AND (Mental health evaluation)) NOT (neoplasms OR Tumors OR Neoplasia OR Neoplasias OR Neoplasm OR Tumor OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Neoplasms, Benig

Intractable pain and physician-patient relationship

((Pain, Intractable OR Intractable Pain OR Intractable Pains OR Pains, Intractable OR Refractory Pain OR Pain, Refractory OR Pains, Refractory OR Refractory Pains) AND (Physician-Patient Relations OR Physician-Patient Relation OR Relation, Physician-Patient OR Relations, Physician-Patient OR Doctor Patient Relations OR Doctor Patient Relation OR Relation, Doctor Patient OR Relations, Doctor Patient OR Doctor-Patient Relations OR Doctor-Patient Relation OR Relation, Doctor-Patient OR Relations, Doctor-Patient OR Physician Patient Relations OR Physician Patient Relation OR Relation, Physician Patient OR Relations, Physician Patient OR Physician Patient Relationship OR Physician Patient Relationships OR Relationship, Physician Patient OR Relationships, Physician Patient)) NOT (neoplasms OR Tumors OR Neoplasia OR Neoplasias OR Neoplasm OR Tumor OR Cancer OR Cancers OR Malignant Neoplasm OR Malignancy OR Malignancies OR Malignant Neoplasms OR Neoplasm, Malignant OR Neoplasms, Malignant OR Benign Neoplasms OR Neoplasms, Benig

Note: An equivalent strategy was used in the Cochrane and LILACS databases.

Figure 1 - Flow diagram of the systematic search and inclusion process. São Paulo, 2024.

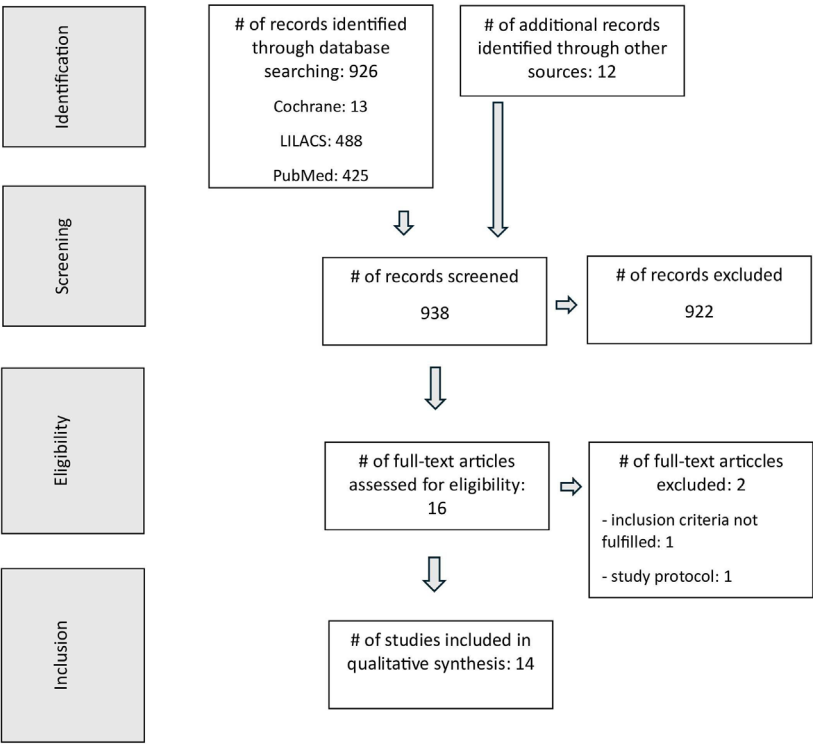


Table 2 - Studies included in the review. São Paulo, 2024.

1 st author, year	Design	Sample characteristics (N)
Jacob, 2013 ⁹	Debate article	NA
Goldman, 2004 ¹⁰	Narrative review	NA
Karłowicz-Bodalska, 2023 ¹¹	Cross-sectional study	Users of non-opioid analgesics (142)
Pedreira, 2023 ¹²	Letter to the editor / Review	NA
Ferreira, 2023 ¹³	Qualitative study	Interviews with 10 healthcare professionals

to be continued...

...continuation - Table 2.

1 st author, year	Design	Sample characteristics (N)
Siqueira, 2014 ¹⁴	Literature review	NA
Pomares-Avalos, 2021 ¹⁵	Case series	Chronic low back pain (70)
McKittrick, 2020 ¹⁶	Case report	Diabetic neuropathy (1)
Cornejo, 2015 ¹⁷	Case report	Trigeminal neuralgia and fibromyalgia (1)
Cornejo, 2015 ¹⁸	Narrative review	NA
Ali, 2022 ¹⁹	Pre-post study	Chronic non-cancer pain (15)
Salveti, 2012 ²⁰	Pre-post study	Chronic non-cancer pain (79)
Shaygan, 2022 ²¹	RCT	Chronic low back pain and depression (30 per group)
Taguchi, 2021 ²²	Uncontrolled trial	Chronic pain and somatic symptoms (16)

Notes:
RCT, randomized controlled trial;
NA, not applicable.

Several of the articles analyzed highlight the importance of a strong doctor-patient relationship in managing CNCP. Jacob⁹ emphasizes the strategic role that a good doctor-patient relationship plays in treatment success. Goldman¹⁰ proposes that anamnesis interviews and consultations should be longer, aiming to explore the patient's emotional background rather than focusing solely on the pain symptom. Karłowicz-Bodalska *et al.*¹¹ report, surprisingly, that more than one-third of patients stated their physicians did not take a medical history during the consultation, in a sample of 142 chronic analgesic users.

Pedreira *et al.*¹² note that poor adherence to pharmacological treatments can reach up to 53% among CNCP patients, suggesting that in cases of apparently ineffective treatment, it is important to consider the possibility of non-adherence to the therapeutic plan. Ferreira *et al.*¹³ indicate that poor treatment adherence can trigger a vicious cycle of frustrations in the doctor-patient relationship, further complicating the clinical picture.

In a literature review, the study by Siqueira *et al.*¹⁴ cites the recommendations of Turk *et al.*²³ regarding when to refer chronic pain patients for psychological evaluation: (a) when the patient's level of disability greatly exceeds what would be expected based on clinical findings; (b) when the patient makes excessive demands on healthcare services; (c) when the patient insists on pursuing unnecessary treatments and exams; (d) in the presence of significant distress; (e) in cases of drug dependence or treatment non-adherence; and (f) prior to in-

terventional procedures.

Pomares-Avalos *et al.*¹⁵, in a case series of 70 patients with low back pain, identified moderate to high-intensity anxiety symptoms in over 40% of the sample, and moderate to high-intensity depressive symptoms in 34% of the sample.

McKittrick *et al.*¹⁶ point out that hypnosis, as a psychotherapeutic technique, was able to reduce pain and improve the quality of life of an elderly patient who had already undergone three lines of pharmacotherapy for diabetic neuropathy.

According to Cornejo *et al.*^{17,18}, the psychotherapeutic approach to patients with CNCP should not rely on a single technique but rather be multidimensional and tailored to each individual patient.

Table 3 presents the results of the four psychological intervention studies for the management of CNCP patients identified in this review^{19,20,21,22}. None of the four studies showed conflicting results regarding the main finding, namely that psychotherapeutic intervention was beneficial for the outcomes investigated (pain reduction, improved disability levels, and alleviation of symptoms such as fatigue, anxiety, and depression). However, only one of the studies included a control group for comparison²¹; even so, in this study, all measures were self-reported, which increases the risk of a type of information bias (recall bias). The other three studies also presented significant methodological limitations, such as small sample sizes, lack of observer blindness, and loss of follow-up of a substantial number of participants.

Table 3 - Psychological intervention studies included in the review. São Paulo, 2024.

1 st author, year	Clinical characteristics of the sample (N)	Intervention	Comparator	Main findings	Reported limitations
Ali, 2022 ¹⁹	CNCP (15)	6 group psychoeducation sessions (2h each) over 6 weeks	–	Improvement in self-efficacy, pain intensity, disability level, fatigue, and depressive symptoms	Small sample size; absence of control group; intervention and data collection conducted by the same researchers
Salvetti, 2012 ²⁰	CNCP (79)	16 group psychoeducation sessions (2h each) over 8 weeks	–	Improvement in pain intensity, disability level, and depressive symptoms	Convenience sample; absence of control group; no follow-up assessment for 50 cases
Shaygan, 2022 ²¹	Chronic low back pain and depression (30 per arm)	7 educational sessions using multimedia (CD-ROM, leaflet, WhatsApp group)	Usual treatment (medical consultation and pharmacotherapy)	Improvement in pain and depression	All measures were self-reported
Taguchi, 2021 ²²	CNCP and somatic symptoms (16)	16 weekly sessions (50 minutes) of cognitive-behavioral therapy	–	Improvement in catastrophizing thoughts, disability level, anxiety, and depression symptoms	Small sample size; absence of control group; no follow-up interview

DISCUSSION

This review identified articles pointing to the relevance of a few mental health and doctor-patient relationship aspects in the clinical management of CNCP patients. The scarcity of publications on such universal topics, such as effective doctor-patient-family communication and other psychosocial variables, is surprising, especially in a field of medical practice where many unsatisfactory outcomes persist despite advances in psychopharmacology and interventional technologies. Beyond the few texts emphasizing the value of a strong doctor-patient relationship and mental health interventions, it is evident that the medical literature overlooks several other key aspects. These aspects will now be integrated into this review and discussed as ten additional suggestions based on the authors' experience and supplementary literature research. We consider this narrative exposition both appropriate and necessary to address, even if preliminarily, some factors that seem to have been neglected and may be hindering case management and contributing to pain chronification.

1. The importance of the patient's full history

Regarding the subjective anamnesis, we agree with the points raised in the articles reviewed^{9,10,11}, but we propose an additional measure: when a patient has been followed by a pain management team for years and treatment appears ineffective, a second examiner should conduct a new anamnesis with the patient. This allows the team to verify

whether the patient's narrative is temporally consistent by reconstructing the history of symptoms from the beginning. If inconsistencies emerge, psychological factors may be influencing the report, suggesting that an exclusive focus on identifying organic substrates as the sole cause of pain may be unproductive.

In another scenario, if the patient is seeing a physician for the first time, it is important to remember that the very act of conducting a new anamnesis (rather than relying solely on medical records) lays the groundwork for building a strong therapeutic relationship. In short, when facing a patient with chronic pain refractory to pharmacological treatment, it is essential to revisit the patient's history. No clinical decision, especially the indication of interventional procedures, should be made without first ensuring that a comprehensive and up-to-date anamnesis has been obtained.

2. Verifying the patient's history through objective anamnesis

Objective anamnesis refers to the information collected from individuals who know the patient well, such as a close family member or trusted friend. Preference should be given to someone who has known the patient since childhood and/or currently lives with them. In a context like chronic pain, where treatment non-adherence may reach up to 53%¹², objective anamnesis must always be collected before declaring a particular treatment

ineffective. It is an indispensable procedure in cases involving severe patients or unclear diagnoses. Even when good concordance is observed between interviewers during subjective anamnesis (Suggestion 1), objective anamnesis remains essential, as it refines the information provided by the patient and opens additional relevant possibilities: (a) to explore how the patient behaves in interpersonal relationships, both at home and at work; (b) to extend the therapeutic alliance to family members and caregivers; (c) to clarify ambiguous aspects of the patient's life history, such as the context of past suicide attempts, use of non-prescribed psychotropics, prior disputes with the labor or social security system, and the patient's history of treatment adherence.

3. Reviewing the medications used by the patient

This suggestion goes beyond asking questions to the patient and accompanying family member. The medical record should also be carefully reviewed, including notes written by colleagues who previously treated the patient. By reading these records, it is possible to: (a) identify whether a colleague previously questioned the patient's medication adherence, and which response was obtained; (b) learn which medications improved the patient's condition and which ones were poorly tolerated; (c) construct a "map" of medication usage, determining whether the maximum recommended doses were reached and/or if optimization strategies were attempted before labeling the treatment as ineffective. It is advisable to review not only recent medications but all those prescribed since the CNCP condition began to be treated.

This measure also allows for the identification of drugs that caused significant side effects and helps to detect whether, at any point, the patient was subjected to unnecessary overlapping of medications (drugs with similar mechanisms of action). It also prevents current healthcare professionals from repeating questionable or harmful polypharmacy. This step would be unnecessary if the patient could be treated exclusively by a single prescribing physician. However, in practice, multiple prescribers are almost unavoidable over the course of CNCP treatment, which makes this review essential.

4. The need to set clear boundaries from the beginning of treatment

Any long-term treatment poses a challenge to both the healthcare team and the patient: maintaining motivation and discipline. When the rules that support the continuity of treatment are repeatedly violated, this is generally a sign that the motiva-

tion for treatment has already faded. Patients with CNCP often present certain personality traits that make it difficult for them to comply with treatment guidelines²⁴. It is therefore necessary to revisit the treatment rules, preferably before deeming a treatment ineffective. These rules may include: (a) the maximum number of absences that will be tolerated; (b) whether missed time will be made up at the end of the consultation if the patient arrives late; (c) duration of the consultation; (d) the feasibility of unscheduled appointments ("fit-ins"); (e) the number of prescriptions or pills to be provided per unit of time or per consultation.

Ideally, these rules should be established by the pain management team at the beginning of care. The patient and their family members should be reminded of them periodically. If treatment has already begun without these initial commitments having been clearly verbalized, the consulting physician should address them as soon as possible, since failing to do so may lead to shared responsibility in the event of therapeutic failure. The team should regularly review whether the previously agreed-upon rules are being followed by both parties, especially before making major therapeutic changes (for example, before abandoning conservative treatment in favor of interventional procedures).

5. Identifying and limiting secondary gains

A secondary gain from illness is defined as a benefit that a given patient may derive from their condition in order to receive attention, exceptions, or care that they would not otherwise obtain²⁵. The "source" of such attention or care may vary, and often does, including family/caregivers, healthcare teams, employers, the social security system, or society at large. Undetected by the "source," secondary gain may allow individuals to evade responsibilities such as school or work attendance, legal sentencing, military conscription, or to receive financial compensation through labor or disability claims, or to access medications with potential for chemical dependency. This last example is particularly critical for chronic pain teams, as many CNCP cases have come to be treated with opioids and other tightly controlled psychotropics. When it comes to secondary gain, it matters little whether or not the patient is consciously aware of their behavior²⁶. What matters is that the motivation for the gain originates externally (i.e., the "source" is outside the individual)²⁵.

What is most important is that, once identified, secondary gains are discussed clearly and limited, since they can positively reinforce the sick role and thus perpetuate pain symptoms and related disabilities. According to Tyrer²⁷, once secondary gains

are recognized, the pain team should meet with the patient and their relatives to explain clearly which physical causes (if any) may be contributing to the pain. Involving close relatives in the discussion is crucial because learned pain behaviors often begin in childhood, when expressions of pain were reinforced by the compassionate attention of family members or caring adults.

Physicians working in large public hospitals should be alert to patients for whom discharge is unthinkable due to their chronic dependence on multiple outpatient services. Some of these patients simply cannot improve because doing so would jeopardize their access, either for themselves or their families and friends to the various clinics that currently provide them with consultations and tests.

Surprisingly, many medical students and residents are not trained to identify secondary gains, or have never even heard of the concept, as if it were a topic reserved solely for psychology education.

6. Identifying and addressing tertiary gain

Tertiary gain refers to situations in which a third party derives some benefit from the persistence of a patient's symptoms or illness²⁸. This third party is often fully aware of their bad faith, as in cases where a relative obstructs the recovery of a patient in order to continue receiving government-issued financial compensation granted to the family.

However, when considering benefits obtained by third parties, it is necessary, and ethically imperative, to include ourselves as healthcare agents and institutions. Pain management teams operating within large centers, before declaring a CNCP treatment ineffective, must examine whether they themselves are contributing to the chronification of the condition. Three subtypes of tertiary gain occurring within clinics or hospitals can be distinguished. Pawl²⁹ identifies tertiary gain through financial compensation: physicians may subject patients to treatments already known to be ineffective, simply because they receive financial remuneration for such procedures. In another example, if a patient takes longer to improve under poorly managed conservative treatments, this may serve as justification for recommending a newer, more invasive, and more expensive intervention. In teaching hospitals, a second subtype may occur: tertiary gain through academic benefit. If a patient recovers quickly, fewer students are exposed to the challenge of managing a rare or complex case. Furthermore, if an interventional procedure anticipated early, the team gains practical experience with invasive techniques, which is welcomed by young

physicians seeking to develop their skills. Finally, a third subtype observed in research centers and academic hospitals is tertiary gain through scientific interest: when patients improve too quickly, they may no longer meet the inclusion criteria for a study, potentially compromising the progression of a researcher's project.

Unfortunately, invasive procedures associated with tertiary gain, besides being ethically unacceptable, can reinforce the patient's identification with a physical cause for their suffering. This strengthens victimization behaviors and further anchors the illness in material substrates such as wounds, scars, or neurological sequelae.

Unlike secondary gain, which pertains to the patient, tertiary gain lies in the domain of others, including healthcare professionals and institutions. And it does not matter whether or not the team is aware of their involvement in tertiary gain (in most cases, only a few members subconsciously perceive that a questionable motivation is influencing therapeutic decisions). What matters is that, once identified, tertiary gain must be firmly confronted, as it raises legal and ethical concerns that may severely damage the reputations of the physician, the team, and the institution as a whole.

7. Optimizing team communication

At times when it seems there is nothing more to be done for a CNCP patient, it may be worthwhile to verify whether the healthcare team has the capacity and willingness to communicate effectively. Regular, multiprofessional meetings should be the rule, not the exception, for making decisions regarding the management of complex cases. During such meetings, the patient's chart should be reviewed by all members, and a shared language for case understanding should be standardized. Likewise, with effective team communication, a single physician can be designated as the patient's primary prescriber, instead of the patient receiving prescriptions for opioids and other psychotropics from a multitude of professionals who rarely meet or communicate.

8. Monitoring the emotions triggered by the patient relationship

If the previous recommendation is implemented, it is expected that regular meetings among team members will naturally begin to address the emotions elicited in professionals by some chronic patients. Ferreira *et al.*¹³ note that patients with poor treatment adherence frequently evoke feelings of helplessness, anger, and frustration in their physicians, and physician frustration, in turn, often

worsens the patient's demotivation. Clinical experience has shown other examples of topics that may arise when the pain team meets to discuss not only each member's expertise, but also the feelings triggered by the doctor-patient relationship³⁰, such as: (a) in some cases, treatment fails despite correct clinical decisions because the patient's desire to heal was long ago projected solely onto the physician; motivation and responsibility for recovery must remain with the patient; (b) team members should not bear excessive guilt over medications or procedures that proved ineffective; (c) team members should avoid responding with hostility to the hostility of patients; (d) when a particular doctor-patient relationship has become toxic, it is possible to "swap" the patient with another team member, temporarily or permanently; (e) feelings of fear toward the patient or a compulsion to resolve all of their problems often stem from pathological aspects of the patient's personality and must be identified, shared, and managed in team meetings.

When the team regularly sets aside time to express and process these emotions among its members, there is a lower risk of the doctor feeling paralyzed in a relationship with a patient for whom he or she no longer knows what to do. These meetings can be facilitated by mental health professionals integrated into the pain management team or invited periodically to serve as external consultants.

9. Referring for psychiatric evaluation and monitoring patient adherence

For several decades, the literature has indicated that certain psychiatric conditions are found in CNCP patients at higher prevalence rates than in the general population. In Brazil, a population-based survey³¹ revealed that the likelihood of mental disorders in the previous 12 months was 2.7 times greater among individuals with chronic pain compared to the general population of the study, with odds ratios of 3.3 for mood disorders and 2.1 for anxiety disorders.

When a CNCP team does not include a psychiatrist, the option to refer the patient to another department or institution for evaluation should be considered. In cases where CNCP appears disproportionate to the organic substrates that might justify it, this referral must occur before any potentially mutilating or interventional treatment is proposed.

Unfortunately, it is still common to mistakenly assume that psychiatric diagnostic scales can substitute for a psychiatrist's evaluation. CNCP patients tend to respond affirmatively to nearly all symptom checklist items. Personality traits such as catastrophizing, immaturity, histrionics, self-victimization,

and lifelong identification with the sick role are associated with polysymptomatic syndromes^{27,32,33,34}. As a result, patients are unlikely to deny experiencing the symptoms listed in the scales, especially if they sense that their continued care depends on a high score. Allowing the patient to describe their suffering in their own words is the most reliable approach. Another concern is that such scales may teach patients new symptom repertoires they did not previously exhibit. The most accurate way to assess a patient's psychic health is through the combination of subjective anamnesis, objective anamnesis, and a mental health examination, three tools routinely used by psychiatrists. Diagnostic scales should be reserved for research purposes rather than incorporated as additional variables in the doctor-patient relationship within clinical settings.

Once a pain management team requests a psychiatric evaluation, it is essential that a team member assumes responsibility for contacting the psychiatrist and periodically monitoring the patient's adherence to psychiatric treatment. According to Wasan *et al.*³⁵, when there is alignment between the treatment approaches of the pain team and the psychiatrist, both parties should agree with the patient that unjustified non-adherence to psychiatric care will lead to the termination of the overall treatment plan, due to violation of the contract previously established within the pain team.

10. Referring for psychological evaluation and monitoring patient adherence

The studies identified in this review indicate several possible psychological approaches that can be applied in the management of CNCP. We agree with Turk *et al.*²³, who argue that psychological treatment strategies should not be seen as alternatives, but rather as a necessary part of comprehensive care for patients with chronic pain.

Once a patient has been referred to a psychologist, it is essential that a member of the team takes responsibility for contacting the professional and periodically monitoring the patient's adherence. According to Wasan *et al.*³⁵, when there is alignment between the therapeutic proposals of the pain team and the psychologist, both parties should agree with the patient that unjustified non-adherence to psychotherapy will result in the termination of the entire treatment plan, due to violation of the contract previously established with the pain team.

Table 4 complements suggestions 9 and 10 by providing examples of when consultations with mental health professionals are necessary or recommended for patients with refractory CNCP.

Table 4 - Examples of indications for referring patients with chronic non-cancer pain for mental health evaluation. São Paulo, 2024.

Indication	Refer to psychiatrist	Refer to psychologist
Suspected current or past depressive disorder	++	-
Suspected current or past anxiety disorder	++	+
Suspected personality disorder	++	+
Current suicide risk or previous suicide attempts	++	-
Suspected somatic symptom disorders	++	+
Suspected current or past substance use disorder (PAS)	++	-
Suspected misuse of analgesic medication	++	-
Suspected factitious disorder	++	+
Suspected malingering	++	+
Emotional symptoms related to family maladjustment	-	++
Non-adherence to prescriptions	+	++
Hysterical traits (conversion or dissociative episodes)	+	++
Suspected catastrophizing	+	++
Suspected chronic pain behavior	+	++
Suspected chronic self-victimization	+	++

Notes:
++ necessary referral
+ recommended referral
- no clear indication for referral
PAS: psychoactive substance

CONCLUSION

In one of the articles cited in the introduction, Kosek *et al.*⁵ state: “Clinicians should explain the meaning of nociplastic pain to their patients, providing simple explanations that help them understand their pain and what can be done...” (p. 2633). Surprisingly, the same article does not even mention psychological, social, and existential factors potentially involved in the development of the pain phenomenon. One might ask: is it truly possible to explain this issue to our patients without addressing such factors?

In an effort to apply the concepts recently put forth by the IASP to clinical practice, this review offers suggestions that may be helpful in cases of refractory pain, especially when the nociplastic mechanism is predominant. In general, these suggestions concern mental health aspects that may be contributing to the complexity of the case, as well as strategies for optimizing the doctor-patient relationship. We believe that when these “non-material” aspects of pain are neglected, the risk of chronicification increases.

The listed suggestions should ideally be implemented before recommending interventional procedures, but they may be adopted at any stage of

treatment. A multidisciplinary approach is strongly recommended, along with regular case discussion meetings for the most complex situations. When the team lacks psychiatrists or psychologists, referral to professionals in other departments or institutions may be appropriate. The indications for such referrals relate to the suspicion that psychiatric or psychological factors may be involved in the causation or perpetuation of the pain condition, or may be interfering with treatment management.

Although this text has highlighted certain aspects, there remains ample room for further research to contribute additional strategies for managing patients with CNCP, as well as empirical studies that uncover other evidence that some pains are being caused or perpetuated by non-material factors. For example, there is room for studies comparing unidisciplinary CNCP treatment with multidisciplinary care, or comparing outcomes of conventional medical routines versus routines incorporating the ten recommendations listed above (or at least some of them). Such studies may, perhaps, offer better therapeutic options for patients and families who have long suffered from nociplastic pain and its resulting limitations.



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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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