# Pain and analgesia in patients with acquired immunodeficiency syndrome\*

Dor e analgesia em pacientes com síndrome da imunodeficiência adquirida

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# **SUMMARY**

BACKGROUND AND OBJECTIVES: In acquired immunodeficiency syndrome (AIDS) patients, pain underdiagnostic and undertreatment are alarming and few studies have evaluated this subject, as well as the records of its incidence. This study aimed at analyzing records about pain and analgesia of hospitalized AIDS patients.

**METHOD**: Documental research with the analysis of 63 medical charts of an AIDS treatment reference hospital of Ceará, in 2010. Data were collected via checklist and results were presented in tables with relative/absolute frequencies.

**RESULTS**: Most medical charts had pain records (90.5%), specifying location (90.5%), improvement/worsening factors (55.6%), intensity (39.7%) and

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frequency (25.4%), among other aspects. Responsible for medical charts were physicians (94.7%), nurses (87.8%) and physical therapists (12.2%). Most frequent sites were headache (50.9%), abdominal pain (52.6%), chest (33.3%), lower limbs (24.6%) and low back pain (29.8%). As to intensity, pain was severe (56%), mild (28%) and moderate (16%). As to duration, pain was continuous (62.5%) and intermittent (37.5%). There has been predominance of non-steroid anti-inflammatory drugs (66.7%), followed by common analgesics (44.4%) and adjuvants (41.3%). Non-pharmacological measures were prescribed in just 11% of medical charts.

**CONCLUSION**: Health professionals have to pay attention to the detailed recording of pain complaints of AIDS patients, with the adoption of adequate tools to evaluate and record evaluated data, to improve assistance and control pain affecting most of these patients.

**Keywords**: Acquired immunodeficiency syndrome, Pain, Pain measurement, Records as subject.

# **RESUMO**

JUSTIFICATIVA E OBJETIVOS: Em pacientes com síndrome da imunodeficiência adquirida (SIDA), o subdiagnóstico e o subtratamento da dor são alarmantes e poucos estudos analisam esse tema, bem como os registros de sua ocorrência. O objetivo deste estudo foi analisar registros sobre dor e analgesia em prontuários de pacientes com SIDA internados.

**MÉTODO**: Pesquisa documental, com análise de 63 prontuários, realizado em hospital de referência no tratamento da SIDA no Ceará, em 2010. Utilizou-se *check-list* para obtenção de dados e os resultados foram apresentados em tabelas com frequências relativo/absoluta.

**RESULTADOS**: Encontrou-se registro de dor na maioria dos prontuários (90,5%), especifican-

do localização (90,5%), fatores de melhora/piora (55,6%), intensidade (39,7%), frequência (25,4%), entre outros aspectos. Foram responsáveis pelos registros médicos (94,7%), enfermeiros (87,8%) e fisioterapeutas (12,2%). Quanto à localização, prevaleceu cefaleia (50,9%), dor abdominal (52,6%), torácica (33,3%), nos membros inferiores (24,6%) e lombalgia (29,8%). Quanto à intensidade, dor forte (56%), leve (28%) e moderada (16%). Quanto à duração, dor contínua (62,5%) e intermitente (37,5%). Nas prescrições farmacológicas, predominou anti-inflamatório não esteroide (66,7%), seguido de analgésicos simples (44,4%) e adjuvantes (41,3%). Medidas não farmacológicas foram prescritas em apenas 11% dos prontuários.

CONCLUSÃO: É necessária a atenção dos profissionais para o registro de informações detalhadas das queixas álgicas dos pacientes com SIDA, com a adoção de instrumentos adequados para a avaliação e registro dos dados avaliados, para melhorar a assistência e o controle da dor que incide na maioria desses pacientes.

**Descritores**: Dor, Medição da Dor, Registros como assunto, Síndrome da imunodeficiência adquirida.

#### INTRODUCTION

Throughout the world, pain is considered one of the most frequent complaints in emergency assistance and outpatient settings of different medical and other health professionals specialties.

Among infectious diseases, it has been commonly related to acquired immunodeficiency virus (HIV) patients, with increased chronic pain rate, especially peripheral neuropathy. In addition, this pain is undertreated and more difficult to handle for several reasons, including complex antiretroviral regimens, higher risk for side effects, higher psychiatric comorbidity rates and substance abuse<sup>1</sup>.

The explanation for pain in acquired immunodeficiency syndrome (AIDS) patients is that as HIV changes the immune system of affected individuals, there is increased number of infections and malignancies, and sequelae generated by immunosuppression have a frequent symptom of pain. So, predominance of pain in virus-infected individuals varies depending on the stage of the disease and on treatment methodology<sup>2</sup>. Given the above, professionals providing care to HIV patients have been encouraged to routinely evaluate pain, paying special attention to intermittent and chronic pain, which may be associated to

the disease itself and/or to opportunistic diseases<sup>3</sup>. For such, they should explore patients' pain complaints, collect data on worsening, attenuating and concomitant factors; they should explore indicators of pain-induced discomfort and use tools which may help its measurement and evaluation, as well as the quality of analgesia<sup>4</sup>. After collected, such data should be promptly recorded in their medical charts, so that they are known and validated by the interdisciplinary team. If there are accurate systematization, evaluation and records, pain is better identified and adequately treated.

Oral complaint is the clearest and safest way to evaluate pain. So, if patients have difficulties to express it, the evaluation for the subject becomes unclear. The health team shall, then, be oriented to measure and record pain in patients' medical charts<sup>5</sup>. This way, patients' medical charts are important means of communication in the hospital, gathering standardized and organized documents where actions taken during patients' hospitalization are recorded. There they may also take notes and provide information to all members of the multiprofessional team, organized in chronological order<sup>6</sup>.

It is imperative to improve communication and health interfaces discussions, since the coding of the communication process directly interferes with patients' recovery because the aim of health care is, through efficiency and technical effectiveness, provide a harmonic understanding among patients, nurses and physicians and, as a consequence, better care. In other words, the effectiveness of communication between multiprofessional health teams and patients provides for patients improvement and should be encouraged and enhanced.

#### **METHOD**

This was a documental, prospective study with quantitative approach, based on the analysis of medical charts of 63 patients admitted from June to August 2010 to a reference hospital for the treatment of infectious diseases in the state of Ceará.

The number of medical charts (63) refers to the number of patients included in the research sample, calculated based on finite population sample calculation. According to hospital data, 207 patients diagnosed with AIDS were admitted to the hospital in the first quarter of 2010. This quantitative has received judicious evaluation of records in their medical charts, from admission to data collection date.

Inclusion criteria were: medical charts of patients admitted for at least one month; with AIDS diag-

nosis for at least six months; and which were completely filled in, legible and contemplating the filling of a checklist. This data collection tool had relevant aspects to evaluate pain records on medical charts, divided into two categories:

- 1. Header: with information such as full name, record, bed and date duly filled;
- 2. Content: existence of pain record, as well as its measurement in evolutions, clinical monitoring sheet, patients' admission; professional responsible for the record; record of pain characteristics; prescribed analgesia; report of professionals about patients' satisfaction with analgesia and use of non-pharmacological measures to relief pain.

This study was approved by the Research Ethics Committee of the institution, under favorable opinion 063/2009.

# **RESULTS**

Table 1 shows data regarding pain characteristics, location and intensity recorded in medical charts.

Table 1 – Pain data recorded in medical charts (n = 63).

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Variables	n	(%)
Pain characteristics $(n = 57)$		
Location	57	(100.0)
Improvement and worsening factors	35	(61.4)
Intensity	25	(43.8)
Frequency	16	(28.0)
Quality	15	(26.3)
Pain-related losses	10	(17.5)
Pain location $(n = 57)$		
Abdomen	30	(52.6)
Head	29	(50.9)
Chest	19	(33.3)
Lumbar spine	17	(29.8)
Lower limbs	14	(24.6)
Upper limbs	10	(17.5)
Cervical spine	8	(14.0)
Others *	15	(26.3)
Pain intensity $(n = 25)$		
Severe	14	(56.0)
Mild	7	(28.0)
Moderate	4	(16.0)

<sup>\*</sup>Hypogastrium(4); joints(4); shoulder(4); flanks(3); anus(3); lower abdomen(3); mouth(2); dorsum(2); inguinal region(2); mesogastrium(1); elbow(1); sternum(1); oropharynx(1); pelvis(1).

Table 2 shows results of the analysis of records related to implemented analgesia, as prescribed and evolved in medical charts of hospitalized AIDS patients.

Table 2 – Analgesia data recorded in medical charts (n = 63).

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Variables	n	(%)
Prescribed analgesics (n = 63)		
NSAIDS*	42	(66.7)
Common analgesics	28	(44.4)
Adjuvants	26	(41.3)
Opioids	19	(30.2)
Prescribed non-pharmacological measure (n = 7)		
Application of heat/cold	3	(42.8)
Topic solution	2	(28.6)
Walking	1	(14.3)
Relaxation	1	(14.3)

<sup>\*</sup>non-steroid anti-inflammatory drugs.

Table 3 shows data regarding quality of pain, as well as improvement/worsening factors and pain-related losses to patients.

Table 3 – Pain quality, improvement/worsening factors and related losses recorded in medical charts (n = 60)

Variables	n	(%)
Qualidade (n = 15)		
Irradiating	5	(33.3)
Pulsatile	3	(20.0)
Burning	1	(6.7)
Stabbing	1	(6.7)
Gripping	1	(6.7)
Alodynia	1	(6.7)
Colic-type	1	(6.7)
Generalized	1	(6.7)
Improvement factors $(n = 10)$		
Medications	6	(60.0)
Rest	2	(20.0)
Eating	1	(10.0)
Evacuating	1	(10.0)
Worsening factors $(n = 25)$		
Palpations	5	(20.0)
Eliminations	5	(20.0)
Mobilization	4	(16.0)
Breathing (inhaling)	4	(16.0)
Eating	3	(12.0)

continues...

Table 3 – continuance

Variables	n	(%)
Ambulation	1	(4.0)
Cough	1	(4.0)
Swallowing	1	(4.0)
Daily life activities	1	(4.0)

### DISCUSSION

Most medical charts had notes about pain, however to thoroughly evaluate pain one should record collected information and strategies used to control it, allowing data sharing among different professionals and improving care<sup>7</sup>, not only the description of pain location and intensity<sup>8</sup>.

Pain locations coincide with those mentioned by other studies with the same type of population<sup>3,9</sup>. A research<sup>9</sup> involving 103 advanced-stage AIDS adults, has shown higher prevalence of pain in lower limbs (66%), followed by mouth (50.5%), head (42.3%) oropharynx (39.8%) and chest (17.5%), which is similar to our study.

Pain intensity was very similar to that of a study<sup>8</sup> on pain and analgesia in hospitalized patients, where pain intensity evaluated by patients has coincided with professionals notes.

A recent study<sup>10</sup> with 302 ambulatory patients has shown differences in pain intensity measured by the numeric scale and has shown that most patients (53%) have referred mild pain, 20% moderate pain and 27% severe pain. Results confirm increased pain intensity with disease progression, because the more the disease advances, the higher is the incidence and intensity of pain. In addition, pain intensity varies depending on care and treatment<sup>1</sup>.

Pain intensity, documented in most medical charts of this research, was not based on the use of standardized tools for pain measurement, but rather on individual analyses of professionals, showing the need for systematic pain evaluation in the institution.

Notwithstanding the subjective component of pain evaluation, tools should be used to standardize the follow up of painful patients, such as unidimensional and multidimensional scales, questionnaires and indices which, in addition to quantifying pain intensity, also evaluate its impact on patients routine and quality of life<sup>11</sup>.

A study<sup>12</sup> checking nursing documents about post-

operative pain evaluation has shown that evaluation was primarily based on patients' self-reports and that less than 10% of medical charts had notes about the systematic use of a pain measurement tool. Pain location was documented in 50% of charts and pain characteristics in just 12%, which is different from what was found in our study.

As to pain duration, our data confirm other studies results, which highlight pain persistence and increased intensity as the disease progresses<sup>1-3,9-10</sup>. With regard to non-pharmacological treatment, most medical charts had no record of its use, however there are studies showing the benefits of such therapies to handle painful patients, as shown by a randomized clinical trial with 79 patients, which has confirmed the potential benefit of art therapy to decrease AIDS-related symptoms, including pain<sup>13</sup>. A recent retrospective study has analyzed pain records of medical charts of children submitted to surgeries and just 11.9% of charts reported the prescription of non-pharmacological strategies for pain relief, showing the poor use of this method<sup>7</sup>. The increased prescription of analgesic adjuvants observed in this study might be related to the fact that approximately 40% of AIDS pain have neuropathic characteristics<sup>1</sup>.

With regard to satisfaction with analgesia, our study found records where patients have reported major pain improvement, without specifying the level of improvement and its repercussions in the evolution. The importance of pain evaluation as the fifth vital sign is clear in health institutions in general<sup>14</sup>, which implies evaluating pain quality and factors associated to its improvement or worsening, for a more oriented care toward analgesic efficacy. Nurses are critical to control pain, evaluate, intervene and monitor treatment, which is made easier if there is effective communication with patients<sup>15</sup>. The presence of pain complaints should be investigated throughout hospitalization, including pain location, intensity, frequency, duration and quality and this should be recorded in tools developed by the institution8.

The understanding of pain quality and improvement and worsening factors (Table 3) is mandatory to establish AIDS patients treatment goals, because it orients nurses and physicians actions to prescribe better analgesic alternatives. In patients where mobilization and ambulation worsen pain, professionals should promote bed rest and provide more comfort without neglecting protective measures such as

change in position and basic hygiene care, which although being able to induce pain, are indispensable and should be preceded by the administration of rescue analgesics, in addition to prescribed drugs to be administered at predetermined times.

The lack of standardized evaluation tools in the institution has not prevented pain from being evaluated and has allowed data on first pain complaint, location, intensity, quality, frequency, duration and improvement and worsening factors to be recorded. However, the adoption of patients' daily pain evaluation standards could contribute to enhance assistance. The health team must know their responsibility with painful patients, and systematized evaluation techniques to build diagnoses and to identify adequate interventions for humanized pain relief are needed<sup>14</sup>.

In studied medical charts, pain characterization as to quality and description of improvement/worsening factors have exceeded values found in the literature with regard to records in medical charts of hospitalized patients.

Medical charts have shown relevant pain characteristics of AIDS patients, especially notes about pain presence, location, duration and intensity for most patients; however, since the institution does not use standardized tools for such records, it is more difficult to provide qualified care, which may be better equated with the adoption of adequate tools to evaluate and record pain-related data.

Records of non-pharmacological treatments may help the use of such therapeutic resources which, added to pharmacological measures, may be relevant to improve the quality of life of painful patients.

# CONCLUSION

Professionals should pay attention to the recording of detailed information about pain complaints of AIDS patients, with the adoption of adequate tools to evaluate and record evaluated data, to improve assistance and to control pain affecting most of these patients.

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