

## ACCESS TO BIOPSY IN THE MUNICIPALITY OF PELOTAS - RIO GRANDE DO SUL

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**Abstract:** OBJECTIVES: The objective of the article was to analyze the access to biopsies in Brazil through research carried out in the city of Pelotas, Rio Grande do Sul in the year 2022. METHODOLOGY: Qualitative, observational study, with exploratory research in order to understand the flow of access to biopsies biopsy procedures in the Unified Health System in Pelotas. Information was collected through interviews with workers at the Pelotas Municipal Health Department, Health Units and specialized outpatient clinics, in addition to direct observation of the process in the capacity of the authors as medical students. RESULTS: Data obtained show the flow of the biopsy procedure, which begins with the doctor's request at the health units and outpatient clinic, its processing followed by the evaluation of the request by a doctor in charge and entry into the queue to wait for hospital or outpatient availability to carrying out the procedure. A repressed demand of 150 biopsies was observed among all specialties, in addition to the 56 requests for biopsies that were rejected by the Health Department and are awaiting a new request by the doctor to be sent to the waiting list. DISCUSSION: Comparing the results obtained in the research of this article with the published bibliography, it was observed consonance of information with emphasis on the difficulty of accessing biopsies as a form of inefficiency of the health system. CONCLUSION: The analysis of the dimension of access to biopsies by the Unified Health System shows its process from its request to the means for its performance and the existing difficulties and limitations that delay the performance of this important procedure for the population.

**Keywords:** Access-to-biopsies; Health-administration; Health Unic System.

## INTRODUCTION

In order to ensure that the basic principles of universality, accessibility, completeness and continuity of care are guaranteed to all citizens in the diagnosis of various pathologies, it is often necessary to perform a biopsy. This is a procedure that consists of the removal of part, fragment or totality of human tissue to be submitted to a laboratory analysis that will evaluate the characteristics and degree of a certain lesion.

Access to this procedure is important, as it helps in choosing the most appropriate treatment and follow-up for that patient. One of the main obstacles to diagnosing different pathologies is the difficulty of access that users of the health system face when trying to perform them, especially when we are talking about medium and high complexity tests, which are beyond the scope of Primary Health Care. (APS) and enter the attributions of the Health Care Networks (RAS)<sup>1</sup>.

Among the various difficulties encountered, the high waiting time for the examinations stands out, which contributes to the late diagnosis of progressive pathologies and to implementing the beginning of treatment, therefore reducing their chances of cure and life expectancy, since the patient may need more aggressive approaches and the association of different therapeutic modalities.<sup>1, 2, 3, 4</sup>

In addition, there is an urgent need to consider the reach of vulnerable and marginalized populations to treatment centers, as certain communities lack their own means of transport and depend on public transport, which is often insufficient, making access to therapeutic resources difficult, which may require multiple visits. of treatment outside its geographic area, as high complexity care centers are concentrated in regional hubs, which hold the most relevant socioeconomic segments in their areas of coverage.<sup>4, 5, 6</sup>

Travel costs that require expenses not

subsidized by the SUS (UNIFIED HEALTH SYSTEM) and must be considered for obtaining access to treatment, such as: food, overnight stay, transportation within the unknown city,<sup>2, 7</sup> using, for this purpose, the family's own remuneration - already lacking - and committing a large part of their family income.<sup>4</sup>

Another problem is the lack of guidelines for referrals and requests for standardized subsidiary tests to all health professionals, essential for ordering tests in a timely manner and effective screening, avoiding underdiagnosis and minimizing iatrogenic risks, in addition to avoiding requesting the same test per person. different professionals at different points in the network.<sup>8</sup>

Another deficit to be highlighted is the lack of a unified information system that integrates all levels of care for referral and counter-referral, allowing monitoring of the waiting time for exams, information on the clinical evolution of the patient, as well as defining order of priority of according to age group and risk factors, supporting a better organization<sup>3, 6, 9</sup> and making the waiting list for a procedure unique, facilitating its management and generating a process of continuity between the PHC and the RAS, connecting their practices.<sup>2, 11</sup>

The supply system, which is insufficient in the face of demand,<sup>10</sup> makes system users, in an attempt to speed up access, seek private assistance to obtain the procedure and/or subsidiary exams, leading to a gap for the emergence of a parallel system, which does not communicate with the public system, further fragmenting the service.<sup>11</sup>

In addition, a single specialized center is the reference in regional assistance, often being unable to meet the demand in the same proportion as it is requested, either due to a shortage of human resources - since there are few specialized professionals for a demand very

large, making this division disproportionate - and/or for financial reasons.<sup>2, 7, 12</sup>

Another relevant point for the health system would be the need for conscious use of resources by health professionals and their knowledge of regulatory processes. This aspect becomes essential, based on the need to standardize the terminologies used, which would avoid possible diagnostic errors. Such a scenario, combined with the excess of referrals, burdens the system and must be combated through the continued and effective training of health professionals for the conscious and appropriate practice of requesting exams and understanding the dynamics of articulation of the various points of the network, combating communication inefficient among them.<sup>2, 8, 11, 13</sup>

In this sense, PHC, through its attributes of integrality, longitudinality and coordination of care, has a prominent role in this important challenge, seeking to connect the different points of the care network and reduce the fragmentation of the system. It is up to the Health System to work in an articulated and resolute manner, reducing inequalities through the organization and prioritization of access and assistance flows in the SUS (UNIFIED HEALTH SYSTEM).<sup>2, 7, 8, 13</sup>

Thus, the objective of the present study is to analyze the population's access to biopsies in the city of Pelotas, Rio Grande do Sul, Brazil, in the year 2022.

## **METHODS**

Qualitative, observational study, at first, of an exploratory nature; and, after, descriptive, in order to understand how the flow of access to biopsies occurs in the city of Pelotas in the year 2022. The collection of information took place through interviews with professionals and health workers of the Municipal Health Department of Pelotas and Health Units, in addition to direct observation of the process,

in the capacity of the authors as medical students. In order to better understand the flow in Pelotas compared to what was recommended, it was decided to review the legislation, protocols and case studies of other municipalities, in an exploratory way, in order to obtain, in the literature, contents that addressed the issue of management in health and demonstrate greater relevance regarding access to biopsies in Brazil. As a way of describing the results, it was decided to start with the patient's entry into the health system, discriminating the origin of the request for the biopsy, be it a Basic Health Unit (UBS) or specialized Outpatient Clinics, making the path imposed by the system for the access until the withdrawal of the final result. There was no need for registration and evaluation by the Research Ethics Committee for using information in the public domain, according to items II and III of article 1, set forth in resolution number 510, of April 7, 2016.

## **RESULTS**

According to data obtained by outpatient clinics and basic health units in the municipality of Pelotas, which cover the demand of over 22 nearby municipalities, biopsies in the Unified Health System are requested by doctors through a written request, as in the case of outpatient clinics. specialists, and later digitized to the Health Assistance and Financial Regulation and Management System Outpatient Regulation Module for Specialized Consultations (AGHOS System) by an employee. In basic health units, the request for biopsies is currently carried out by the doctor by typing directly into the AGHOS System via the computer. Then, the AGHOS system generates a number for each individual request that is noted in the patient's medical record to control data regarding the date. Thus, the Department of Health of Pelotas receives requests via the AGHOS System

that are destined to the waiting list for the procedure according to the type of request, specialty and urgent need.

It was found that biopsy requests are evaluated by a doctor hired by the Secretary of Health of Pelotas, who forwards them to the waiting list for the procedure. Biopsies described as urgent in your request, after evaluation by the Health Department doctor and proven to be urgently needed, are placed as a priority on the patient waiting list. Patients waiting in the queue are called to perform the biopsy according to the vacancies offered by the hospitals in the municipality. When there is a hospital vacancy to perform the procedure, the Secretary of Health contacts the patient via WhatsApp to assess availability to perform the procedure, this notice is valid for 72 hours for the patient to respond, otherwise, another person from the queue wait is called.

The number of vacancies contracted is different from the number of vacancies offered, and this is confirmed in the face of biopsies of the pleura, endometrium, vulva, among others, which in theory, there must be x vacancies, but none are offered by the health services. In view of this, the main current problem in patient access to biopsies in the city of Pelotas is the lack of vacancies for performing biopsies by hospitals through the Unified Health System.

Another deficit in the system for accessing biopsies is the justification, which is often incomplete or incorrectly requested in the AGHOS System, which leads to rejection of the request for a biopsy at the time of its evaluation and referral of the patient to the waiting list at the Department of Health. It was found that, in the face of rejected biopsy requests, the Health Department contacts the outpatient clinic or basic health unit so that the requesting doctor redoes the request again with the necessary corrections by the AGHOS System so that the patient is referred to the

queue waiting procedure.

After notification by the Department of Health, via WhatsApp, about the availability of the place and date for the procedure and the patient's confirmation, the patient can undergo the procedure in the hospital's surgical center or at the Olivas Leite outpatient clinic, the latter only in selected mild cases, such as certain skin biopsies. After performing the procedure, the surgical specimen of the biopsy is collected and sent to the laboratory associated with each institution that performs anatomopathological analysis, and, after studying the specimen, the result is entered by the laboratory directly into the laboratory's own system. About 20 to 30 days after the procedure, it is possible to analyze, discuss and deliver the result to the patient after scheduling a new appointment.

Another problem we face in accessing biopsies, this one less common, is the eventual loss of the surgical specimen between the process of collecting the biopsy and sending it to the laboratory, this eventual loss entails the need for a new biopsy request for the patient and the process restarts by a new request in the AGHOS System.

Through the Department of Health of Pelotas, data was obtained that, between January 2019 and October 31, 2022 in the city of Pelotas and 22 nearby municipalities, the repressed demand for consultations, that is, the total number of patients waiting for consultations all medical specialties listed in the system was a total of 41,704 people. In addition, during this same period, a repressed demand for 150 biopsies was observed among all specialties, in addition to the 56 requests for biopsies that were rejected by the Health Department and are awaiting a new request by the doctor to be sent to the waiting list.

Currently, in the city of Pelotas, it was found that only prostate biopsies are in progress with vacancies being offered by hospitals, with 53



people on the waiting list for prostate biopsies. In addition, 5 women are awaiting cervical biopsy, but no vacancies are being offered for this type of procedure.

In view of this, other relevant information collected in a specialized outpatient clinic that serves the SUS (UNIFIED HEALTH SYSTEM) is that there is a forecast for the implementation of a new workflow management system to replace the AGHOS System, the Gercon system that is planned for the next year (2023) and aims to further individualize patient information in this process of requesting appointments and procedures.

One issue to be raised in view of these results of few biopsies currently being performed in Pelotas is that, many times, the patient who waits for months and even years to undergo a procedure through the SUS (UNIFIED HEALTH SYSTEM) may choose to do it privately, however, for example, if the biopsy performed privately shows pathology in need of treatment with radiotherapy or chemotherapy, the patient loses follow-up by the SUS (UNIFIED HEALTH SYSTEM). Thus, when this patient enters the SUS (UNIFIED HEALTH SYSTEM) again to obtain this treatment, often at exorbitant amounts to be carried out privately, he returns to the end of a waiting list to obtain the treatment that he would have obtained more directly if the procedure was performed by the SUS (UNIFIED HEALTH SYSTEM). All of this directly impacts the health of the patient.

The collected results are schematized in Figure 1, in order to demonstrate the access process to biopsies in the city of Pelotas.

## DISCUSSION

As observed in the study, patients using the SUS (UNIFIED HEALTH SYSTEM) go a long way to the biopsy collection procedure. There is no prediction about the waiting time in the queue, a fact that can be considered frustrating for the patient, and lead him to disbelief in the health system, or even to abandon his clinical follow-up. In addition, it is not up to the patient to discern the real need for his examination, but the health team, which must guide and carry out the appropriate health education that each patient requires.

It was observed that, during the pandemic in 2020 in Brazil, there were 237,697 biopsies, a reduction of 35.3%, with April 2020 being the month with the greatest drop in the number of biopsies (-68.8%). when compared to 2019, pre-pandemic.<sup>14</sup> Another study specifies that the request for complementary exams needs to be better adapted and contextualized, especially in Primary Health Care, since they are often requested unnecessarily.<sup>15</sup>

In the meantime, it is worth mentioning the study by Simon et al<sup>16</sup>, carried out in Porto Alegre (RS), a health region close to the present study, which evaluated the waiting time for Rheumatology consultations. This study demonstrated significant variability in results, with no definite cause for cases that had a prolonged waiting time. Furthermore, a very close relationship was found between the delay in care and patient absenteeism, which agrees with the possibility that one of the problems in accessing biopsies in Pelotas could be related to the same prolonged waiting time, combined with the lack of access to biopsies in Pelotas. connection between the health team and the population.

In addition, another relevant study on waiting time was carried out by Martinez et al.<sup>17</sup>, in the field of Cardiology, and demonstrated how much the waiting time faced by the patient, linked to the geographic

region inhabited by him, impacts on the mortality outcome, when waiting for a specialized exam or procedure. That SUS (Unified Health System) tries to implicate the difficulty of accessing biopsies in the health of patients and the central role of prioritizing the most serious cases, which may be much more vulnerable to the outcome of death during their waiting time.

When biopsies are not performed, whether due to delay in performing the procedure or due to the non-availability of the service in the region, it has negative impacts on the patient's health, as well as on the Health System, which will pay for this portion of the population that unable to perform the biopsies, leading to inconclusive diagnoses, overdiagnosis, treatments that will no longer be efficient, excess of other unnecessary tests and procedures and, subsequently, hospitalization for not defining, diagnosing and adequately treating the opportune time. This scenario brings serious complications and consequences for the population in terms of health, as it makes impracticable and accelerates methods of investigating pathologies, such as biopsy.

In general, the present study is in line with most of the published literature, which demonstrates the difficulty of accessing biopsies as a form of inefficiency in the health system. More studies are needed in order to relate this difficulty of access to a possible lack of resources, or even to an organizational shortage in the system. Limitations of the article can be discussed, such as the veracity and precision of the information collected, in addition to possible subjectivity from the interviewees and researchers.

Since breast cancer is the type that most affects women worldwide, with an estimated 66,280 new cases in 2022 in Brazil, where it ranks first in mortality from neoplasia in women, with the highest rates concentrated in

the South and In the Southeast, such concern is expressed with the severity of the pent-up demand found in the city of Pelotas-RS for breast biopsies.<sup>19</sup>

In addition to the failure to implement effective treatment in a timely manner, the lack of specialized tests makes it difficult to continuously monitor the progress of the disease in the population, in addition to implementing effective measures to combat and treat it due to the lack of consistent epidemiological data.

Skin cancer (melanoma and non-melanoma) is the most common type of cancer in the world and also in our country. According to data from the National Cancer Institute (INCA), Brazil has the highest rates of the disease concentrated in the southern region, with emphasis on the significant number of cases in the state of Rio Grande do Sul, which has the highest mortality rate in the country. by melanoma and a higher incidence of new cases in men, reaching 8.02 per 100,000 inhabitants.<sup>18</sup>

The best results in treatment and the chance of curing the disease directly depend on the identification of SUS (Unified Health System) breast lesions and early diagnosis through biopsy, generating more effective results in treatment and fewer surgical sequelae.

In 2015, through a survey of diagnostic procedures for skin cancer, it was found that, in the southern region of the country, most procedures were performed in a hospital environment, and 538 records of such biopsies were excluded from the survey due to inconsistent information, demonstrating probable failures in some part of the process.<sup>18</sup>

In short, when the diagnosis occurs early, it allows lower rates of aggressive treatments and mutilating surgeries, less severe physical and psychological impacts, reduction of side effects secondary to procedures and medications, management at an outpatient

level and with less need for intervention, resulting in less encumbrance to the Public Health System and public coffers.

## CONCLUSION

From the bibliographic research carried out and the evaluation of the information obtained, important weaknesses were found in the access of the Brazilian population to biopsies, mainly for patients who need to undergo this type of examination through the Unified Health System (SUS (UNIFIED HEALTH SYSTEM)).

It was observed that, in addition to the lack of vacancies offered for carrying out biopsies, which is the most important barrier found in the study, aspects such as the biopsy request made in writing also causes delay in requests, considering that there are problems in understanding what is written on paper, for example, illegible handwriting.

In addition, the way in which the request is made, even electronically, has also caused

delays in accessing the biopsies, considering that, if the request is made incorrectly, it returns to its place of origin for the proper correction of the error by the referring doctor. This way, there is an urgent need for administrative measures that guarantee the provision of comprehensive and resolving health actions to SUS (UNIFIED HEALTH SYSTEM) patients. In addition, bringing this current problem to the Municipal Health Council in follow-up meetings, causing mobilization of all parties since only a minimum number of procedures are being performed and this harm the health of patients, becomes indispensable, in addition to require compliance with contracted biopsies in the medium complexity. Finally, health services must offer a sufficient number of vacancies for biopsies and pragmatically comply with what is recommended in contracting their respective services, under the responsibility of true providers of the SUS (UNIFIED HEALTH SYSTEM).

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