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ABSTRACT

**Background:** Headache is a common medical complaint and a leading reason for medical consultation. Physical examination of the patient with headache is often omitted.

**Case Presentation:** We present a 66-year-old, right-handed female patient who was investigated for headache with a series of neuroimaging modalities in another center and was diagnosed as herpes zoster of the scalp in our clinic.

Conclusion: It is crucial to keep in mind that physical examination is critical to the diagnostic process in headache.

**Keywords:** Case report, clinical neurology examination, herpes zoster, neuropathic pain, secondary headache disorders, viral infections.

Received: 06 June 2020	Accepted: 21 October 2020	Type of Article: CASE REPORT	Specialty: Neurology
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# Background

Headache is a common medical complaint and a leading reason for medical consultation. The reason why physicians carry out many screening tests with skipping some of the main steps of basic physical examination, such as inspection, is the fear of misdiagnosing and mismanaging a secondary headache disorder [1]. We present here a 66-year-old, right-handed female patient who was investigated for headache with a series of neuroimaging modalities in another center and was diagnosed as herpes zoster of the scalp in our clinic.

Forgotten practice: inspection in

headache - a case report

Bedia Samanci<sup>1</sup> , Yavuz Samanci<sup>2\*</sup>

#### **Case Presentation**

A 66-year-old female patient presented with a 1-week history of aching, stinging, and throbbing in the right parietal area. From her medical history, it was learned that she was admitted to the emergency department of another center 2 days ago and underwent cranial computed tomography scan, followed by a contrast-enhanced magnetic resonance imaging and angiography scan. All imaging modalities resulted in age-related gray and white matter changes. A lumbar puncture was performed, revealing no cerebrospinal fluid abnormality. She was prescribed non-steroidal analgesics and was referred to our clinic the next day. Physical examination revealed erythematous vesicular eruptions and crusting on the right parietal scalp (Figure 1a). Tzanck smear from the vesicular lesions of the scalp revealed multinucleated giant cells (Figure 1b). She was diagnosed with herpes zoster based on clinical findings and Tzanck smear test and was treated with acyclovir and gabapentin. The lesions resolved completely 2 weeks later (Figure 1c).

#### Discussion

Physical examination is of utmost importance for preventing diagnostic errors, as laboratory tests should only be used to support diagnosis [1]. However, overuse of unnecessary medical tests and imaging tests decreases the significance of physical examination, especially in patients with common disorders such as an headache. Unlike in other medical specialties, detailed history-taking and physical examination are still needed in the headaches field to make the correct diagnosis [2].

Headache is a common complaint that accounts for about 25% of the neurology outpatient clinic admissions, and 90% of these headaches are primary headache disorders in which neuroimaging studies are normal. The tendency for ordering unnecessary and expensive tests can be due to (a) an increase in patient volume and shorter appointment times physicians can devote to their patients, (b) the fear of medical errors, (c) patients with multiple complaints [3], and (d) studies documenting superiority of advanced diagnostic methods compared to physical examination. However, extreme dependence on technology has failed to improve patient outcomes and has led to overdiagnosis and overtreatment [4,5]. Regarding the concerns mentioned earlier, in our case, the diagnosis could have been challenging because of the hair covering the scalp area [6].

Volume 5(1):16–17 https://doi.org/10.24911/ejmcr/173-1591446095



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**Figure 1.** (a) Erythematous vesicular eruptions and crusting were noticed on the right parietal scalp, (b) multinuclear giant cells on tzanck smear, and (c) the resolved lesions 2 weeks after the treatment.

# Conclusion

Clinical history and physical examination should not be neglected in headache patients, and it should be kept in mind that they can provide much of the information needed for the diagnosis.

# What is new?

In this case report of herpes zoster of the scalp, we emphasize the importance of physical examination in patients presenting with common disorders, such as an headache. If the prior physical examination of the patient in this case was not performed in a perfunctory and superficial manner, she would not have to undergo unnecessary diagnostic testing.

# Funding

None.

# **Conflict of interests**

The authors declare that there is no conflict of interests regarding the publication of this case report.

# **Consent for publication**

Written informed consent was taken from the patient.

# **Ethical approval**

Ethical approval is not required at our institution for publishing an anonymous case report.

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# Summary of the case

1	Patient (gender, age)	Female, 66-year-old	
2	Final diagnosis	Herpes zoster of the scalp	
3	Symptoms	Aching, stinging, and throbbing in the right parietal area	
4	Medications	Acyclovir and gabapentin	
5	Clinical procedure	ure The lesions resolved completely 2 weeks later	
6	Specialty	Neurology	