ISR Journal of Medical Case Reports (ISRJMCR)
Homepage: https://isrpublisher.com/isrjmcr/
Volume 01, Issue 04, August 2025 ISSN: 3107-5576 (Online)

Chronic Dorsalgia Revealing Foraminal Tarlov Cysts at D10: A Case Report

S. Bah[1]*, M. K. Diakité[1], S. Auhmani[1], B. Odoulou[1], A. Diani[1], M. R. Bouroumane[1], M. Benzalim[1], S. Alj[1]

[1]Ibn Tofail Hospital, Marrackech, Morocco

***Corresponding author:** S. Bah
Ibn Tofail Hospital, Marrackech, Morocco

Article History

Received: 20-07-2025

Accepted: 29-07-2025

Published: 08-08-2025

Abstract: Case Report

Tarlov cysts, or perineural cysts, are abnormal dilatations of the meningeal space around the spinal nerve roots, most frequently located in the sacral region. They are often discovered incidentally but can occasionally present with chronic pain symptoms. We report the case of a 79-year-old man with no significant medical history who consulted for chronic dorsal pain evolving over the course of a year. A thoracolumbar CT scan revealed two foraminal cystic formations in contact with the D10 nerve roots, consistent with Tarlov cysts. This case illustrates a rare thoracic location and highlights the role of imaging in the differential diagnosis of chronic back pain.

Keywords: Tarlov cyst, Thoracolumbar CT, Perineural cyst, Foraminal roots, Thoracic spine.

Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution **4.0 International License (CC BY-NC 4.0)** which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Tarlov cysts are cerebrospinal fluid-filled perineural cysts located along the dorsal spinal nerve roots, most commonly at the sacral level. They are generally asymptomatic and incidentally discovered during imaging performed for other reasons. In some cases, they may enlarge and compress adjacent nerve roots, leading to pain or neurological symptoms.

Thoracic localization of Tarlov cysts is uncommon. Diagnosis relies primarily on cross-sectional imaging, with typical features seen on CT and MRI. Management depends on symptom severity and cyst size.

Case Report

A 79-year-old man with no relevant medical history presented with chronic dorsal pain persisting for nearly one year. The pain was mechanical in nature, non-radiating, and not associated with any neurological signs.

Clinical examination was unremarkable, with no motor deficits or sphincter disorders. Due to the persistence of symptoms, a **thoracolumbar CT scan** was performed.

The scan revealed **two well-demarcated hypodense formations**, each measuring approximately 15 mm, located within the **foraminal spaces at the level of the D10 vertebra**, bilaterally. These lesions, with fluid density, showed no calcification or contrast enhancement. They were in **direct contact with the D10 foraminal nerve roots**, with no evidence of adjacent bone erosion or spinal canal stenosis. Their morphology was typical of **Tarlov cysts**.

Differential diagnosis with arachnoid cysts was excluded based on the strict foraminal location and bilateral distribution.

The patient was managed conservatively with second-line analgesics and scheduled for routine clinical follow-up. An MRI was planned within 6 months to confirm the diagnosis and monitor progression.

A: axial: Right Cyst

B: Sagittal

C: axial, left cyst

DISCUSSION

First described by Tarlov in 1938, **perineural cysts** are dilated nerve root sheaths containing cerebrospinal fluid. They are relatively common, with a prevalence estimated between 1–5% in the general population, and are typically located at the sacral level [1].

Thoracic involvement is rare and seldom reported in the literature [2]. While most Tarlov cysts remain asymptomatic, they may cause radicular symptoms when large enough to compress adjacent structures.

On **CT scans**, Tarlov cysts appear as well-circumscribed, hypodense, non-enhancing lesions, sometimes associated with bone remodeling or erosion. **MRI** remains the imaging modality of choice for precise characterization, allowing differentiation from arachnoid cysts, schwannomas, or other spinal lesions [3, 4].

Management is usually conservative in asymptomatic or mildly symptomatic cases. Surgical treatment or percutaneous interventions (such as fibrin glue injections or cyst fenestration) are considered for patients with persistent and disabling symptoms [5].

CONCLUSION

This case illustrates an unusual presentation of **Tarlov cysts at the thoracic level**, causing chronic back pain in an elderly patient. CT imaging plays a crucial role in identifying these lesions and guiding treatment strategy. MRI is often complementary and necessary for accurate diagnosis. Conservative management is appropriate in most cases but requires close clinical monitoring.

REFERENCES

1. Tarlov, I. M. (1938). Perineurial cysts of the spinal nerve roots. *Arch Neurol Psychiatry*, *40*(6), 1067–1074.
2. Nabors, M. W., Pait, T. G., Byrd, E. B., Karim, N. O., Davis, D. O., & Kobrine, A. I. (1988). Updated assessment and classification of spinal meningeal cysts. *J Neurosurg*, *68*(3), 366–377.
3. Langdown, A. J., Grundy, J. R., & Birch, N. C. (2005). The clinical relevance of Tarlov cysts. *J Spinal Disord Tech*, *18*(1), 29–33.
4. Patel, M. R., Louie, W., & Rachlin, J. R. (1997). Percutaneous fibrin glue therapy of meningeal cysts of the sacral spine. *AJR Am J Roentgenol*, *168*(2), 367–370.
5. Paulsen, R. D., Call, G. A., & Murtagh, F. R. (1994). Prevalence and percutaneous drainage of Tarlov cysts. *AJNR Am J Neuroradiol*, *15*(2), 293–297.