

Open Access Article

## Complete Recovery Chronic Retro-Odontoid Pseudotumor Et HNP with Laminectomy and Cervical Disc Replacement

I. Nyoman Semita<sup>1</sup>, Yuna Annisa Salsabila<sup>2\*</sup>, Ni Njoman Juliasih<sup>3</sup>

<sup>1</sup> Doctoral Program of Medical Science, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia

<sup>2</sup> Medical Student, Jember University, Jember, Indonesia

<sup>3</sup> Department of Public Health, School of Medicine, Universitas Ciputra, Surabaya, Indonesia

**Abstract:** A rare case found, 54-year-old male patient was experiencing pain in his neck since 20 years ago and had been gradually worsening with weakness of upper and lower extremity. Magnetic resonance images and cervical spine plain photo showed a retro-odontoid pseudotumor and HNP. This lesion behaves as a tumor-like lesion that causes inflammation. HNP cervical related with CX3CL1/CX3CR1 interaction in Rheumatoid Arthritis (RA). The paper aims to report a rare case of a patient with complete recovery chronic retro-odontoid pseudotumor C1 and hernia nucleus pulposus C3-4 C4-5 C6-7. The patient was treated with a two-phase procedure: laminectomy and cervical disc replacement. The patient had paresis and tingling in the upper and lower extremities for the past three months with radiating neck pain for 20 years after the two-phase operation. The patient completely recovered after underwent two phases of procedure and 2-years follow-up evaluation. Chronic retro odontoid pseudotumor C1 et hernia nucleus pulposus C3-4 C4-5 C6-7 can recover completely with laminectomy and cervical disc replacement without symptoms or complaint after two years. HNP cervical can relate to rheumatoid arthritis that causes retro odontoid pseudotumor in this case.

**Keywords:** hernia nucleus pulposus, retro-odontoid pseudotumor, rheumatoid arthritis.

### 椎板切除术和颈椎间盘置换术完全恢复慢性后齿状突假瘤

**摘要:** 一个罕见的案例发现, 54 岁的男性患者从 20 年前开始颈部疼痛, 并逐渐恶化, 上肢和下肢无力。磁共振图像和颈椎平片显示后齿状突假瘤和 HNP。这种病变表现为引起炎症的肿瘤样病变。HNP 颈椎病与类风湿性关节炎 (RA) 中 CX3CL1/CX3CR1 的相互作用有关。本文旨在报告一例罕见的完全康复慢性齿状突后假瘤 C1 和髓核 C3-4 C4-5 C6-7 患者。该患者接受了两阶段手术: 椎板切除术和颈椎间盘置换术。患者术后 3 个月出现上下肢麻痹、刺痛, 放射性颈痛 20 年。经过两期手术和 2 年随访评估, 患者完全康复。慢性齿状突后假瘤 C1 和髓核 C3-4 C4-5 C6-7 可以通过椎板切除术和颈椎间盘置换术完全康复, 两年后无症状或主诉。在这种情况下, HNP 颈椎病可能与导致后齿状突假瘤的类风湿性关节炎有关。

**关键词:** 髓核疝、牙后突假瘤、类风湿性关节炎。

## 1. Introduction

Cases of retro odontoid pseudotumor (ROP) are very rare. This mass is an uncommon condition in RA

patients [1]. In 2004-2015, only three cases were found with rheumatoid arthritis from 38 retro-odontoid pseudotumor individuals [2]. There are no case reports

Received: May 1, 2021 / Revised: June 6, 2021 / Accepted: July 30, 2021 / Published: September 30, 2021

About the authors: I. Nyoman Semita, Doctoral Program of Medical Science, Faculty of Medicine, Universitas Airlangga, Surabaya, Indonesia; Yuna Annisa Salsabila, Medical Student, Jember University, Jember, Indonesia; Ni Njoman Juliasih, Department of Public Health, School of Medicine, Universitas Ciputra, Surabaya, Indonesia

Corresponding author Yuna Annisa Salsabila, [192011101039@mail.unej.ac.id](mailto:192011101039@mail.unej.ac.id)