

## Dahl's Sign

**AMC da Silva Almendra\*, CD Rodrigues Antunes and LFL da Costa Froes**

Pulmonology Service, Lisbon North Hospital and University Center, Portugal

**\*Corresponding author:** Alexandre Manuel Carvalho da Silva Almendra, Pulmonology Service, Lisbon North Hospital and University Center, Portugal, Tel: +351911091766; E-mail: [allux2@gmail.com](mailto:allux2@gmail.com)

**Received:** September 11, 2020; **Accepted:** September 19, 2020; **Published:** October 05, 2020



**Dhal's Signal:** 62-year-old man, smoker and with Chronic Obstructive Pulmonary Disease (COPD)-GOLD 4D (Forced Expiratory Volume in the first second (FEV1) post-BD-27%). Admitted to intensive care after cardiac arrest secondary to pneumonia. On chest teleradiography, he showed signs of pulmonary insufflation and hypotransparency at the right base. On physical examination, he had circular, hyperpigmented lesions on the anterior aspect of her thighs-consistent with Dahl's sign.

The Dahl sign, also known as the Thinker sign, was first described in a patient with severe COPD in 1963 [1]. It is characterized by hyperpigmentation caused by persistent pressure from the elbows under the thighs in the tripod position [1]. This position maximizes the effectiveness of accessory muscles in inspiration in addition to the increase in intra-abdominal pressure which consequently allows the diaphragm to resume its natural position improving the inspiratory capacity [2]. It is usually present in

patients with very severe COPD (FEV1<30%) but also in other situations associated with severe respiratory failure (e.g., interstitial lung disease, severe asthma and congestive heart failure) [3]. Despite being less and less frequent, the search for this sign and its identification in a patient are an indicator of the severity of the obstructive condition.

## REFERENCES

1. Rothenberg HJ. The thinker's sign. JAMA. 1963; 184: 902-903.
2. Lemyze M, Van Grunderbeeck N, Mallat J, et al. Thinker's sign. Am J Respir Crit Care Med. 2011; 183: 413.
3. Rebick G, Morin S. The thinker's sign. CMAJ. 2008; 179: 611.