

Spontaneous pneumomediastinum and epidural pneumatosis in an adolescent precipitated by weight lifting: a case report and review.

[Sadarangani S¹](#), [Patel DR](#), [Pejka S](#).

Author information

Abstract

Spontaneous pneumomediastinum is an uncommon condition in athletes. The most common cause of spontaneous pneumomediastinum is alveolar rupture into the bronchovascular sheath as a result of increased intrathoracic pressure. Epidural pneumatosis (pneumorrhachis) has been rarely associated with spontaneous pneumomediastinum. In this article, we describe a case of a 17-year-old male who presented with neck and chest pain that started 14 hours after a weight lifting session. He developed both a pneumomediastinum and epidural pneumatosis--an association that is rarely reported in a setting without trauma. To our knowledge, there have been only 5 case reports of pneumomediastinum precipitated by weight lifting. Improper breathing technique during weight lifting can increase the intrathoracic pressure and the risk of pneumomediastinum; hence, it is important that physicians and trainers who work with athletes provide instructions regarding proper breathing techniques during weight lifting. In addition to the case discussion, this article reviews spontaneous pneumomediastinum and epidural pneumatosis.

PMID:

[20048552](#)

DOI:

[10.3810/psm.2009.12.1753](#)