

oropharynx to the rectum, and the duodenum is most frequently affected, followed by the stomach, esophagus and colon^(1,2).

Kaposi's sarcoma is about 300 times more common in AIDS patients than in those with other immunodeficiency types, and generally occurs in the setting of CD4 count below 150–200 cells/mm³⁽¹⁾.

The diagnosis is made by means of digestive endoscopy and biopsy. The classical endoscopic finding is represented by subepithelial, reddish, ulcerative or non-ulcerative lesions⁽³⁾.

Barium studies characterize polypoid lesions with smooth contour with sizes ranging from few millimeters to 3 cm. Larger lesions may ulcerate, giving the lesion a “bullseye” or “target” pattern⁽⁴⁾.

Computed tomography detects subepithelial polypoid lesions or irregular thickening of gastric folds, which after intravenous contrast injection show hypervascular behavior, with a more marked enhancement than that of the adjacent mucosa in the arterial phase due to the intense vascularization of the tumor. Additionally, peripancreatic lymph node enlargement may be observed in the porta hepatis, mesenterium and retroperitoneum in up 80% of cases^(1,3).

Kaposi's sarcoma with visceral involvement is frequently associated with poor prognosis. The treatment includes antiretroviral therapy, radiotherapy, and chemotherapy⁽⁵⁾.

The authors conclude that Kaposi's sarcoma should be considered in the differential diagnosis of hypervascular submucosal lesions, particularly in AIDS patients.

REFERENCES

- Restrepo CS, Martinez S, Lemos JA, et al. Imaging manifestations of Kaposi sarcoma. *Radiographics*. 2006;26:1169–85.
- Arora M, Goldberg EM. Kaposi sarcoma involving the gastrointestinal tract. *Gastroenterol Hepatol*. 2010;6:459–62.
- Lee NK, Kim S, Kim GH, et al. Hypervascular subepithelial gastrointestinal masses: CT-pathologic correlation. *Radiographics*. 2010;30:1915–34.
- Rose HS, Balthazar EJ, Megibow AL, et al. Alimentary tract involvement in Kaposi sarcoma: radiographic and endoscopic findings in 25 homosexual men. *AJR Am J Roentgenol*. 1982;139:661–6.
- Radu O, Pantanowitz L. Kaposi sarcoma. *Arch Pathol Lab Med*. 2013;137:289–94.

Veluma Lopes Teixeira¹, Pedro José de Santana Júnior¹, Kim-Ir-Sen Santos Teixeira¹, Daniella Carneiro¹, Marise Moreira¹, Gabriela Moura Paula¹

1. Hospital das Clínicas da Universidade Federal de Goiás (UFG), Goiânia, GO, Brazil. Mailing Address: Dr. Pedro José de Santana Júnior. Departamento de Radiologia. Avenida Primeira Avenida, s/nº, Setor Leste Universitário. Goiânia, GO, Brazil, 74605-020. E-mail: pedrojosesantanajr@hotmail.com.

<http://dx.doi.org/10.1590/0100-3984.2014.0033>

Acute post-tonsillectomy negative pressure pulmonary edema

Edema pulmonar agudo por pressão negativa pós-tonsilectomia

Dear Editor,

A female, 28-year patient was submitted to tonsillectomy and developed respiratory discomfort immediately after the procedure. At the following day, posteroanterior and lateral chest radiography demonstrated coalescent, poorly defined opacities in both lungs, sparing the periphery and characterizing the so called “butterfly wing” pattern, compatible with a diffuse alveolar process. The cardiac image was normal (Figure 1A). Three days after the procedure, without any use of medication, radiographic images (same views) revealed the opacities disappearance (Figure 1B).

Negative pressure pulmonary edema (NPPE) represents a rare occurrence in surgeries (0.094%), most frequently reported

in buccomaxillary-facial and oral surgeries due to the probability of upper airway obstruction^(1–3). This condition is divided into two classes, namely, type I NPPE caused by upper airway obstruction such as, for example, post-tracheal extubation laryngospasm, epiglottitis, tracheal cannula obstruction and postoperative vocal cord paralysis^(3–6). Type II NPPE occurs after corrective surgical procedures for chronic airway obstruction such as tonsillar hyperplasia, sleep apnea, tumors and acromegaly^(7,8). In such cases, the treatment should be aimed at reverting hypoxia and decreasing the pulmonary fluid volume^(1–5). The prognosis is good, with recovery at the first 24 hours.⁽⁸⁾

Radiographic and chest CT findings of NPPE include interstitial edema progressing to alveolar edema in more severe cases. Generally, regression of symptoms and radiological finding is observed within two or three days⁽⁶⁾. Many diseases present with

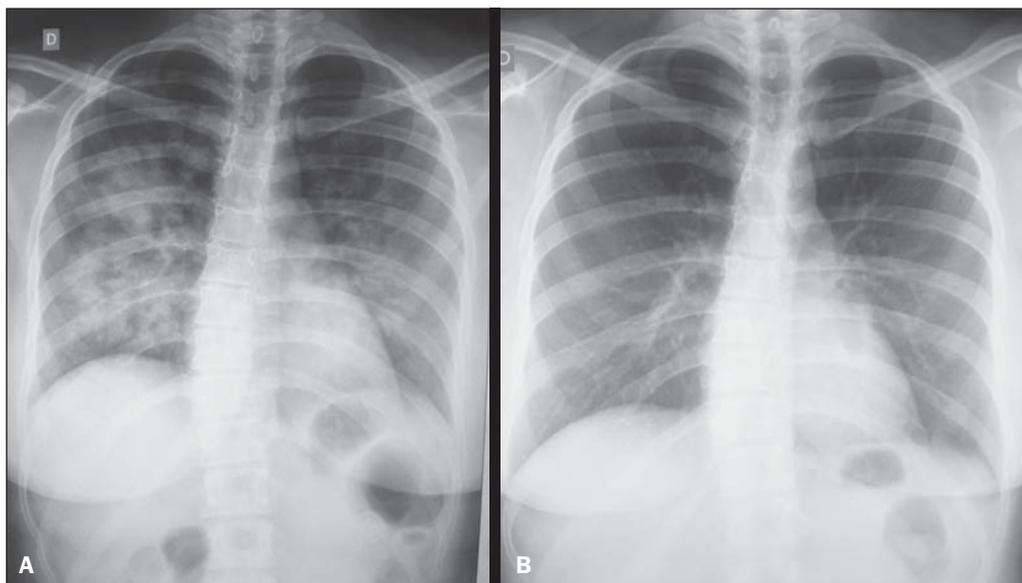


Figure 1. A: Posteroanterior chest radiographic image showing bilateral, coalescent, poorly defined opacities, characterizing the so called “butterfly wing” pattern, which is typical of alveolar process. The cardiac image is normal. These images were acquired on the following day after tonsillectomy. The patient presented with mild dyspnea. **B:** Posteroanterior chest radiographic image acquired three days after the procedure. Complete resolution of the alveolar process demonstrated on the previous images.

radiological sings of diffuse alveolar process but this is not a specific finding in any of them⁽⁹⁾. In the present case, the patient was healthy, with no comorbidity at the immediate postoperative period following upper airway surgery (tonsillectomy), presenting spontaneous resolution in only three days. Despite the nonspecificity of the radiological pattern, the preoperative history of the patient and the prompt resolution allowed for ruling out other causes, and NPPE was the only remaining possible diagnosis. Thus, the authors considered to be unnecessary to proceed with the diagnostic investigation with other imaging methods and laboratory tests.

REFERENCES

1. Cascade PN, Alexander GD, Mackie DS. Negative-pressure pulmonary edema after endotracheal intubation. *Radiology*. 1993;186:671–5.
2. Mamiya H, Ichinohe T, Kaneko Y. Negative pressure pulmonary edema after oral and maxillofacial surgery. *Anesth Prog*. 2009;56:49–52.
3. Deepika K, Kanaan CA, Barrocas AM, et al. Negative pressure pulmonary edema after acute upper airway obstruction. *J Clin Anesth*. 1997;9:403–8.
4. Davidson S, Guinn C, Gacharna D. Diagnosis and treatment of negative

- pressure pulmonary edema in a pediatric patient: a case report. *AANA J*. 2004;72:337–8.
5. Timby J, Reed C, Zeilender S, et al. “Mechanical” causes of pulmonary edema. *Chest*. 1990;98:973–9.
6. Sulek C. Negative-pressure pulmonary edema. In: Gravenstein N, Kirby RR, editors. *Complications in anesthesiology*. 2nd ed. Philadelphia, PA: Lippincott-Raven; 1996. p. 191–7.
7. Hobaika ABS, Lorentz MN. Laringoespasm. *Rev Bras Anesthesiol*. 2009;59:487–95.
8. Albergaria VF, Soares CM, Araújo RM, et al. Edema pulmonar por pressão negativa após hipofisectomia transesfenoidal. Relato de caso. *Rev Bras Anesthesiol*. 2008;58:391–6.
9. Felson B. Disseminated interstitial diseases of the lung. *Ann Radiol*. 1966;9:325–45.

Lais Bastos Pessanha¹, Adriana Maria Fonseca de Melo¹, Flavia Silva Braga¹, Gabriel Antonio de Oliveira¹, Livia Guidoni de Assis Barbosa¹, Antonio Roberto Carrareto¹

1. Universidade Federal do Espírito Santo (UFES), Vitória, ES, Brazil. Mailing Address: Dra. Lais Bastos Pessanha. Rua Primeiro de Maio, 79, Centro. Campos dos Goytacazes, RJ, Brazil, 28035-145. E-mail: laispessanha@hotmail.com.

<http://dx.doi.org/10.1590/0100-3984.2013.0015>

Mammographic artifact leading to false-positive result

Artefato em mamografia causando resultado falso-positivo

Dear Editor,

A female, 75-year-old was referred by another service with previous screening mammogram demonstrating clustered pleomorphic microcalcifications in the superolateral quadrant of her left breast, classified as highly suspicious mammographic findings (BI-RADS category 5), to be submitted to mammography-guided needle localization followed by excisional biopsy of the suspicious lesion.

A new mammography demonstrated an apparently benign nodule already present and stable in relation to the findings of the previous mammogram, besides the presence of clustered pleomorphic microcalcifications, both findings located in the superolateral quadrant of the left breast. The finding of suspicious microcalcifications drew attention for being a round-shaped cluster (Figures 1A and 1B).

A new assessment detected a skin nevus with irregular surface presenting with talc residues in the lesion fissures. Once the lesion was marked with a metal clip, a new mammographic image revealed that the microcalcifications corresponded to artifacts related to the talc residues present on the dermal nevus surface (Figures 1C and 1D). The mammogram was reclassified as benign mammographic findings (BI-RADS category 2) and the patient was referred for follow-up at the public basic health network.

Except for non-melanoma skin tumors, breast cancer is the most frequent neoplasm with high mortality in women in Brazil⁽¹⁾. Mammography is the main imaging method for the early diagnosis of breast cancer; and the analysis of the differences between normal breast tissue and suspicious findings requires high imaging quality for early detection of lesions^(2–9). In addition, the presence of imaging artifacts reduces the sensitivity and specificity of imaging methods, masking or mimicking the diagnosis of initial-stage lesions and leading to the adoption of inappropriate approaches.

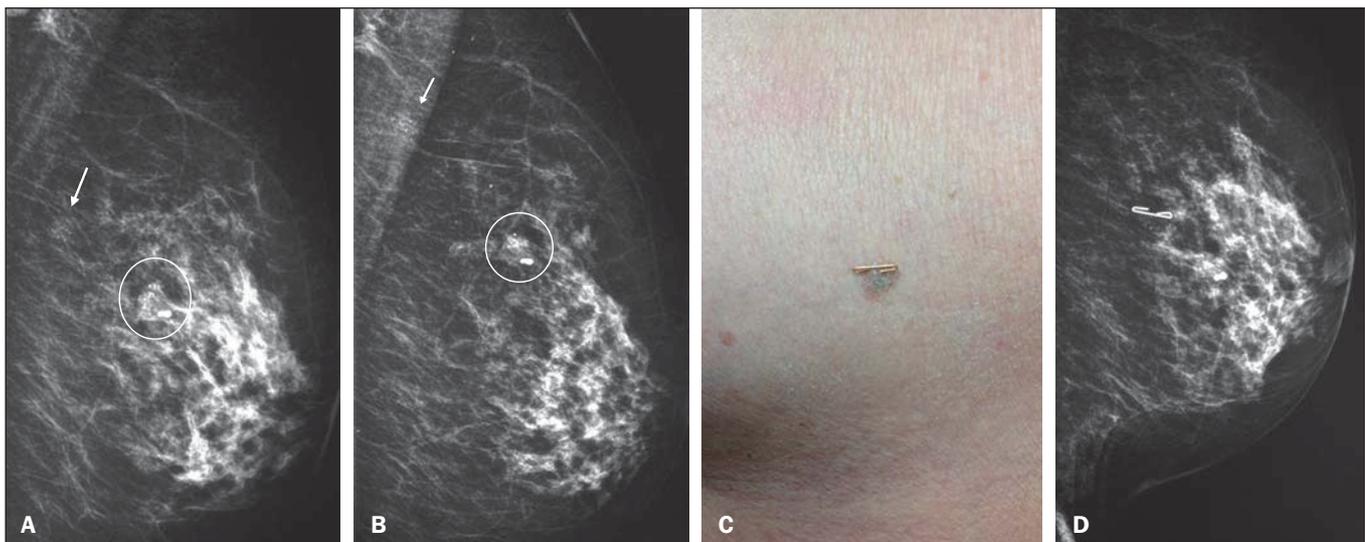


Figure 1. A,B: Mediolateral oblique and craniocaudal views of left breast showing a partially calcified nodule (circle) and a cluster of pleomorphic microcalcifications (arrow) located in the superolateral quadrant of the breast. C,D: Metal clip on the dermal nevus with talc residues in its fissures, and craniocaudal view of the left breast demonstrating that the cluster of microcalcifications corresponded to talc residues.