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Gânglio inguinal como única evidência de cancro progressivo do pulmão

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Caso Clínico
Clinical Case

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Gânglio inguinal como única evidência de cancro progressivo do pulmão

Inguinal lymph node as the only evidence of progressive lung cancer

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Resumo

Os tumores que metastizam para os gânglios inguinais têm frequentemente origem nos órgãos genitais e reprodutores, na pele, no recto ou ânus, ou na bexiga[1,2]. Há, no entanto, algumas descrições de casos raros de metástases inguinais de tumores localizados acima do diafragma[2-5], e apenas três destes apresentavam uma metástase inguinal reconhecida antes da morte. Estes casos estão detalhadamente descritos na literatura médica de língua inglesa[3-5]. Os tumores primários destes casos eram mesotelioma maligno e carcinomas do conduto salivar e da mama. Descrevemos

Abstact

Tumours that metastasise to groin nodes most frequently originate in genital and reproductive organs, skin, rectum or anus, or urinary bladder[1,2]. However, rare cases of inguinal metastases from tumours above the diaphragm have been reported[2-5] and only three of them had an inguinal metastasis which was recognised antemortem and reported in detail in the English medical literature[3-5]. The primary tumours of these cases were malignant mesothelioma, salivary duct and breast carcinoma. In this paper, we report a case

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um caso de carcinoma do pulmão que metastizou para gânglio inguinal, como única evidência de cancro do pulmão progressivo.

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Palavras-chave: Carcinoma do pulmão de não pequenas células, gânglio inguinal, metástase, progressão da doença.

of carcinoma of the lung metastatic to an inguinal lymph node as the only evidence of progressive lung cancer.

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Key-words: Non-small cell lung carcinoma, inguinal lymph node, metastasis, disease progression.

Case

A 58 year-old man presented with a 3-month history of cough, mild dyspnea, loss of appetite, hemoptisy that had become severe in the previous two weeks. He had smoked a pack of cigarettes a day for 32 years. On physical examination, the patient appeared fatigued. No rash or lymphadenopathy were detected. A chest X-ray revealed the nonhomogen opacity in the right perihilar region that was suspected of being a bronchogenic carcinoma. A computed tomography scanning of the chest demonstrated the presence of a right perihilar mass invading the main bronchus and extending to the subcarinal region and multiple mediastinal lymphadenopathies in the right inferior paratracheal and subcarinal regions. Fiberoptic bronchoscopy showed the presence of a polipoid mass in the entrance of right main bronchus and bronchoscopic biopsy revealed the presence of abnormal histology, consistent with non-small cell carcinoma of the lung (NSCLC). The type of the lung cancer was most probably squamous cell carcinoma.

With the diagnosis of a locally advanced NSCLC (T4N2M0), the patient was treated with radiation therapy (60 Gy in 30 fractions) and chemotherapy (cisplatin-75 mg/m² and taxotere-75 mg/m² every 3 weeks) sequentially. After 4 cycles of chemotherapy, CT scan of the thorax showed minimal regression.

Five months after the diagnosis, admission to hospital was demanded because of a one-month history of right pelvic pain and swelling in the right inguinal region. On physical examination, there was a hard, tender, semi-mobile lymph node of 3×2 cm in size in the right groin. The other lymph nodes including the left inguinal, supraclavicular, and axillary nodes were clinically negative. Over the previous few weeks, the lesion had enlarged despite use of some antibiotic agents. External genitalia were clinically normal and rectal examination revealed no abnormalities. Magnetic resonance imaging showed an enhanced soft-tissue mass (lymphadenopathy) with a size of 3×3 cm in the right inguinal region. Because the inguinal lymph node region was an unusual site for metastasis from carcinoma of the lung, it was not suspected that the patient had developed metastatic disease.

Therefore, procto-sigmoidoscopy and CT scan of abdomen and pelvis were performed and revealed no abnormalities except for the mass in the inguinal region. Tumour markers were all within normal range. The lesion was biopsied for the differential diagnosis.

Histopathologic examination of the lymph node revealed a metastatic carcinoma with total effacement of the lymph node architecture by epithelial tumor infiltration. Microscopically, solid epithelial tumour nests within a desmoplastic stroma were noted. The large pleomorphic tumour cells had vesicular nucleus with prominent nucleoli and a finely granular eosinophilic cytoplasm. The irregular solid tumour nests were similar to the carcinoma of the lung diagnosed 5 months previously (Figs. 1a,b). Special stains were performed. Tumour cells were positive immunohistochemically for cytokeratin (AE1/3), high weight keratin (34βE12), focally for cytokeratin 7 (CK7). Cytokeratin 20 (CK20), cytokeratin 5 (CK 5), CEA, LCA, HMB45, PSA and neuroendocrine markers (chromogranin and synaptophysin) were all negative. Histochemically, PAS-AB and mucicarmine stains did not showed any mucin expression in the tumor cells. TTF-1 antibody was also applied and showed no nuclear staining in both biopsies from lung and lymph node. These microscopic features and immunohistochemical profile, in association with the clinical and radiological findings, led to the diagnosis of large cell carcinoma of the lung metastatic to the inguinal lymph node.

The patient was offered surgery but came back with progressed lesion and severe pain two months later. He had not undergone surgery but used some herbal agents with no benefit. The repeated CT scan of pelvis showed a enlarged mass (8×8×7 cm) which

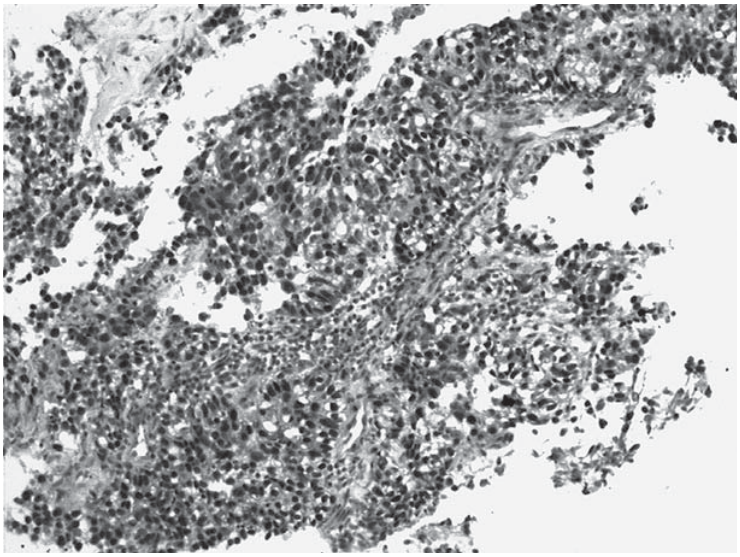

Fig. 1a – Solid sheet of large epithelial cells within an inflammatory fibrovascular stroma from a bronchoscopic biopsy. Individual cells possessing large pleomorphic nucleus with a moderate amount of cytoplasm H&E ×10)

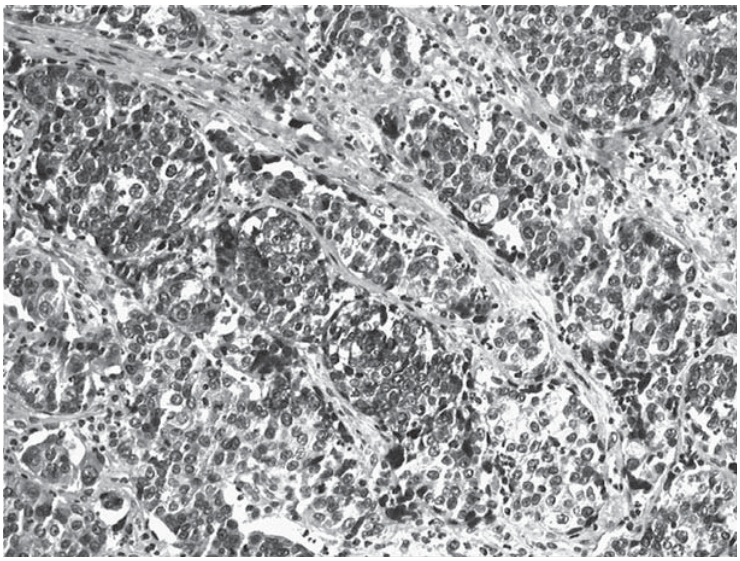

Fig. 1b – Solid epithelial nests with a desmoplastic stroma from a biopsy of inguinal mass. Cells showing large vesicular nucleus with prominent nucleoli and large amount of cytoplasm (H&E ×10)

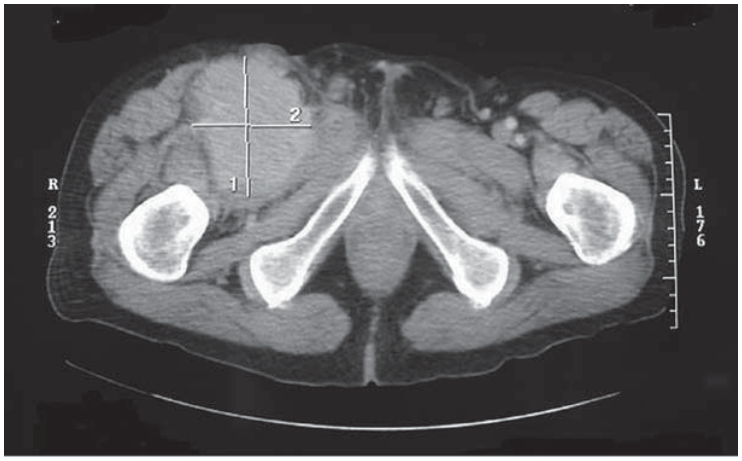

Fig. 2 – Axial CT of the pelvis showing a lymph node in the right inguinal region

now irresectable (Fig. 2). The patient received palliative radiotherapy (36 Gy in 12 fractions); pain relief was achieved and partial regression of the mass was observed after the treatment was completed. Unfortunately, he died of progressive disease 5 months later.

Discussion

Extrathoracic nodal metastasis is a rare clinical finding in patients with NSCLC[6,7]. Quint *et al.* performed a study to determine the incidence and locations of metastatic disease at presentation in patients with NSCLC[6]. They noted that abdominal and axillary lymph nodes were metastatic in <1% of patients. In a retrospective study of 1486 cases of surgically removed NSCLC by Riquet *et al.,* 22 patients (1.5%) had extrathoracic nodal metastases and only one (<0.1%) of which was related to inguinal lymph node region[7].

The lymphatic metastatic pathway of lung cancer goes from the hilar or mediastinal lymph nodes to the supraclavicular lymph nodes. From the hilar lymph (bronchopulmonary) nodes, the cells tend to drain in a superior fashion along the tracheobronchial, paraesophageal, and aortic regions into scalene nodes at the base of the neck; even more remote sites such as cervical nodes can be involved. Due to the rich crossover interconnections about the hilar region, the subcarinal and contralateral hilar nodes are always at risk of being involved. With retrograde or inferior drainage into subcarinal nodes, more blockages occurs, which leads the flow into subdiaphragmatic nodal regions. With invasion of the mediastinal lymph nodes, the tumour can often invade the thoracic duct as well as general circulation[8]. In the current case, there was a subcarinal lymphadenopathy but no enlarged intraabdominal lymph nodes on abdominal CT. However, we still think that there might be intraabdominal lymph nodes that could not be identified by CT. The haematogenous dissemination is probably the explanation of this patient's metastatic inguinal lesion.

Definitive diagnosis of any lesion or adenopathy in the groin should be made with biopsy. For the current case, the inguinal lymph adenopathy was not initially thought to be metastatic because of the unusual location for metastasis, and biopsy was carried out for an exact diagnosis. By light microscopy, the differential diagnosis of the metastatic tumor to the inguinal lymph node included metastatic adenocarcinoma, metastatic squamous cell carcinoma, melanoma, urothelial carcinoma or renal cell carcinoma. The absence of a history of primary urothelial carcinoma or renal cell carcinoma, intracytoplasmic mucin and CK20 negativity suggested that the inguinal tumour was not a metastasis of a car-

cinoma from bladder, kidney or colon. The immunohistochemical findings narrowed the possibilities to either metastatic carcinoma. HMB-45, CEA, PSA negativity excluded the possibilities of a metastatic melanoma, adenocarcinoma or prostate cancer. The history of a NSCLC led us to think about a metastatic lung carcinoma. TTF-1 immunostaining did not show any definite origin of the tumour. However, TTF-1 negativity does not exclude lung carcinoma metastatic to inguinal lymph node, as other carcinomas than adenocarcinomas and small cell carcinomas are negative for TTF-1 [9-11]. While the positivity for high weight keratin, p63 and light microscopic features favoured us to a poorly differentiated metastatic squamous cell carcinoma, the origin of the metastatic tumour was suggested by the clinical findings and morphologic resemblance to the carcinoma previously diagnosed in the lung.

In conclusion, although extremely rare, metastatic disease to the inguinal region in patients with a history of lung cancer should be considered in the differential diagnosis of any lesion in the groin.

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