

Image in Medicine: Squamous Cell Granulomas in Completely Regressed Stage IIIB Lung Cancer after Chemoradiation Therapy

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Citation

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Abstract

A stage IIIB squamous cell carcinoma of the lung was treated with neoadjuvant chemoradiation therapy before pneumonectomy. The postsurgical specimen showed complete pathologic response with no viable tumor identified. However, extensive squamous cell granulomas were present in the previous tumor bed. Squamous cell granulomas can cause diagnostic difficulty, and have only been previously described in treated head and neck squamous carcinomas in the literature.

CASE REPORT

A 52-year-old man presented with cough. CT scan revealed a right bronchial lesion, diagnosed as squamous cell carcinoma on biopsy. Exploratory thoracotomy revealed invasion into the pulmonary vein and a positive level 7 lymph node, leading to stage IIIB (T4, N2, M0). The patient underwent chemoradiation therapy with cisplatin, etoposide and 60 Gy of mediastinal radiation, followed by right pneumonectomy. Post-operative pathology revealed complete response (ypT0, N0) without residual tumor. However, numerous squamous cell granulomas were seen in the previous tumor bed, some within arterial walls suggesting previous lymphatic invasion (Fig. 1, 100x), and some within hilar lymph nodes with prominent asteroid bodies (Fig. 2, 100x; inset, 400x).

Figure 1

Figure 1: The wall of an artery with squamous cell granulomas

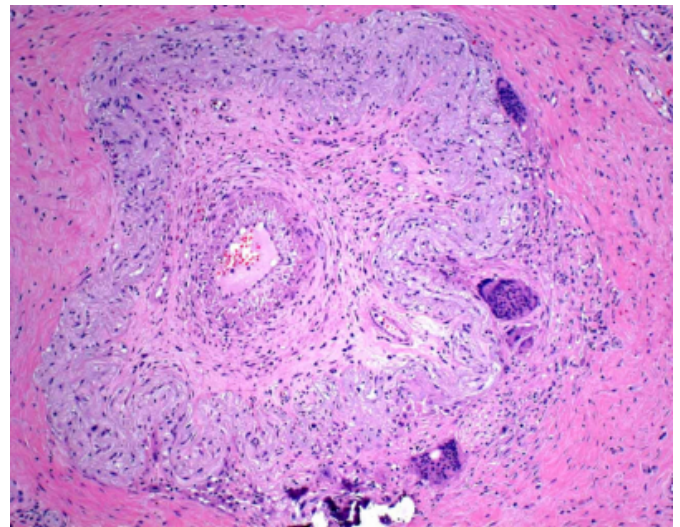
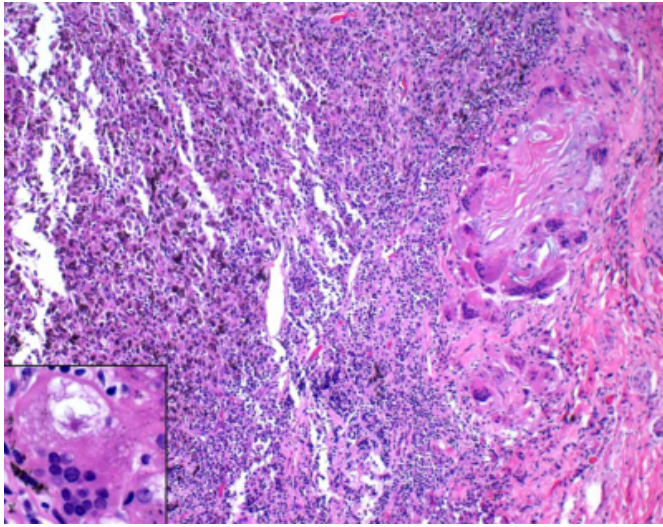


Figure 2

Figure 2: Squamous cell granulomas in hilar lymph node, with prominent asteroid body



DISCUSSION

This case demonstrates the efficacy of chemoradiation therapy for high stage, metastatic squamous cell carcinoma of the lung. Complete pathological response after chemoradiation therapy has been documented in this type of tumors.¹ Extensive squamous cell granulomas can cause diagnostic difficulty, and have only been described in the literature in treated head and neck squamous cell carcinomas.²

References

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