Solitary fibrous tumour of the chest wall

ABSTRACT

Extrapleural solitary fibrous tumours (SFTs) are rare tumours characterized by patternless spindle cells with haemangiopericytoma-like vascular spaces. Previously the tumours have been classified as haemangiopericytoma, an entity that is now considered obsolete. We report a case of extrapleural SFT arising in the soft tissue of the chest wall. The patient was a 31-year-old Malay lady presenting with a mobile swelling of the right chest wall for more than five years. During excision the tumour was noted to be well-circumscribed and yellowish in colour, giving an impression of lipoma. Microscopically, the tumour had patternless architecture, characterized by hypocellular and hypercellular areas. It was composed of uniform, spindle-shaped cells displaying oval nuclei, inconspicuous nucleoli, pale cytoplasm and indistinct cell borders. The mitotic count was 2 per 10 HPF. Branching, medium-sized thin-walled blood vessels in a haemangiopericytomatous growth pattern, some with hyalinised wall were identified. The neoplastic cells were immunoreactive to CD99 and CD34 and were non-immunoreactive to Desmin, Smooth Muscle Actin, S100 protein and EMA. We elucidate the challenges in diagnosing this tumour in this unusual location.

Keyword: Extrapleural; Solitary fibrous tumour; Haemangiopericytoma; Chest wall