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Title: Disappearance of hypoglycemic attacks after resection of solitary fibrous tumors with high expression of insulin-like growth factor II

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Body: Hypoglycemia rarely accompanies solitary fibrous tumors (SFT) of the pleura, occurring in only about 4% of patients. We describe our experience with 2 patients whose hypoglycemic attacks disappeared after the resection of SFT. Patient 1: The patient was an 81-year-old woman. Computed tomography of the chest showed a mass compressing the entire right lower lobe. SFT was diagnosed on histopathological examination of a percutaneous needle biopsy specimen. Subsequently, tumor resection was performed, and the hypoglycemia disappeared. Histopathologically, the tumor was associated with abundant proliferations of markedly hyalinized collagen fibers. The tumor contained small bundles of round cells or spindle cells with mild atypia, proliferating in an irregular, intermingled fashion. On immunohistochemical staining, the tumor cells were positive for CD34. Patient 2: The patient was a 77-year-old man with dyspnea on exertion. Preoperative computed tomography showed a well-demarcated, giant mass compressing the right middle lobe. Therefore, the mass was resected, and the hypoglycemia disappeared. Histopathological examination revealed proliferations of collagen fibers containing spindle cells with low-grade atypia, proliferating in an irregular storiform fashion with positive for CD34. In both case, serum insulin level valued remarkably lower than 0.2 μ U/ml and the immunohistochemical staining of Insulin-like growth factor II (IGF-II) were positive. Tumor resection was suggested to be an effective treatment for hypoglycemic attacks in

patients with SFT. IGF- II may provide negative feedback with respect to insulin secretion.