Dermatofibrosarcoma Protuberans: Report of a Case

Yen-Chien Lee¹, Jen-Pin Chuang², Chia-Cheng Lin³, Yen-Ling Lee⁴, Wu-Chou Su⁴, Po-Chang Lee⁵

Dermatofibrosarcoma protuberans (DFSP), a rare indolent cutaneous tumor, arises from the rearrangement of chromosomes 17 and 22. The optimal treatment for DFSP is resection with wide margins. DFSP is radiosensitive. Adjuvant radiotherapy may be considered in case of a positive resection margin or close margin. We report a 69-year-old Taiwanese man with DFSP. The lesion began to grow in the front part of the chest wall about 3 years previously. In the past 6 months, the lesion became larger and harder. Surgical resection was performed and the pathology report showed dermatofibrosarcoma with a close margin (about 0.2 cm). For fear of cardiovascular complications, and due to the old age of the patient and the location of the tumor in the front part of the chest wall, radiation therapy was not performed. Eight months after the operation, the patient remained free from recurrence. He is still under close follow up, as the median time of recurrence is around 38 months after surgery.

Key word: dermatofibrosarcoma protuberans

Dermatofibrosarcoma protuberans (DFSP) is an uncommon, low-grade cutaneous sarcoma recognized for its aggressive local behavior, but low metastatic potential.¹ It was first described by Taylor in 1890.² This tumor typically is fixed to the dermis but moves freely over deeper-lying tissue, and does not exhibit a nodular growth pattern until late in its course. Linn et al.,³ who used array-based comparative genomic hybridization (array CGH) and DNA microarray, found that DFSP had a distinctive expression profile characterized by the amplification of sequences from chromosomes 17q and 22q, with these sequences being bounded by the COL1A1 and PDGFB genes. We report a man with a history of a growing mass on the chest wall with the initial impression of atheroma, which was later shown to be dermatofibrosarcoma, and discuss recent advances in the treatment of this disease.

Case Report

A 69-year-old man came to the clinic for a progressively growing mass on the chest wall in the past 6 months. He paid attention to the mass about 3 years before. Initially, it was movable, without pigmentation change in skin color. No itching, tenderness, or ulceration occurred. However, in the past six months, he felt that the skin texture became harder. The size also became larger and larger. On physical examination, there was mild hyperpigmentation without local heat or tenderness. The mass was movable and elastic in texture. The size was around 4 cm in diameter. The other findings were unremarkable. Laboratory analyses including the blood parameters, biochemistry were normal except for a high creatinine level around 1.49 mg/dl. Surgical resection