Specialty for Patient with Trunk or Extremity Soft Tissue Tumors: Referral Pattern at Local Base Hospital in Central Japan

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Background
Physicians, who treat palpable soft tissue tumors in Japan, are musculoskeletal oncologists of orthopaedic specialty in Japan. However, not a few patients with soft tissue sarcomas have been treated inadequately by physicians who lack the knowledge of sarcomas. The aims of this study were to investigate the current status of referral manner of patients with soft tissue tumors, and expose the problems on the systems of medical care in Japan.

Methods
There are approximate 60 affiliated hospitals of Orthopaedic Surgery, Nagoya University Hospital in central part of Japan. Among affiliated hospitals, excluding cancer center hospitals, children’s hospitals, orthopaedic hospitals, a questionnaire survey was carried out in 58 affiliated hospitals. Questionnaire survey was composed of (1) which clinical department treat patients with palpable 3cm-mass of their back region?, (2) which clinical department treat patients with palpable 3cm-mass of their thigh region?, to (a) hospital receptionists, (b) director of orthopaedic surgery in the hospital. Questionnaire to receptionists was carried out by telephone, and that to directors was by mail. Multiple answers were allowed.

Results
Fifty-eight affiliated hospitals have 24,600 beds in total, and 32,000 surgeries were performed. Fifty-seven receptionists of 58 hospitals and 47 directors of 58 hospitals answered the questionnaire. (1) (a) There were 14 hospitals with multiple answers. Thirty receptionists (42%) answered general surgeon will treat patients with soft tissue sarcoma of their back. Twenty-one (30%) answered dermatologists, twelve (17%) did orthopaedic surgeons. (2) (a) Twenty-nine (41%) receptionists answered general surgeon will treat patients with soft tissue sarcoma of their thigh. Twenty-one (30%) answered orthopaedic surgeons, thirteen (23%) did orthopaedic surgeons (Figure 1). On the other hand, (1) (b) Thirty-seven directors (49%) answered general surgeon will treat patients with soft tissue sarcoma of their back. Twenty-four (32%) answered orthopaedic surgeons. (2) (b) Forty-seven (70%) directors believed orthopaedic surgeons will treat patients with soft tissue sarcoma of their thigh. Eleven (16%)

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answered general surgeons.

Conclusions
In Japan, soft tissue tumors should be treated by orthopaedic oncologists because of the existing practice style. The results of this study revealed that hospital receptionists do not know the specialty handling patients with soft tissue tumors. Contrary to the handling at the hospital reception, directors of orthopaedic surgeons in affiliated hospitals believe that patients with soft tissue tumors, particularly in the thigh region, are referred to orthopaedic surgeons. To reduce the incidence of inadequate treatment for patients with soft tissue sarcomas, educational activities not only to hospital receptionists also physicians who has potential to treat patients with soft tissue tumors are required.

Figure 1. Specialty for patients with palpable thigh mass