

· ·

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·
: 1986 1994
10 7 7 (3 4 ~ 10 2)
stage B
3 , 2 , 2 ,
1 , 6
가 3 , 1 . 10 7
3
: 40 1 9
65%(43 ~ 90%) ,
75%(28 ~ 95%), 82%(63 ~ 100%) .
3 가 , 1
3
:
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: , , ,

5, 10, 15, 19)

10, 16, 19)

가

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134
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* 16

4, 6, 11, 12, 14), 3, 12, 20)

Enneking stage system⁷⁾ stage B, stage 3

가 (1, 2, 12, 13)

1 cisplatin, 2 cisplatin(100mg/m²), adriamycin(60mg/m²), 1 adriamycin, vincristine(1.5mg/m²), cytoxan(1200mg/m²), 1 epirubicin(90mg/m²), cytoxan(900mg/m²), vincristine(2mg/m²), dacarbazine(DTIC, 300mg/m²)

1986 1994

10

7 7 (3 4 ~ 10)

2) 가 6 , 가 4 (stage B)

30 (15 ~ 40)

3 , 2 , 1 , 9

2 , Musculoskeletal Tumor Society⁸⁾ , S345A 1 , S345B 2 , S123A 3 , S2345B 3

1 가 3 , 6

(Table 1). 1 , 10 7 3

2 5 ~ 7cm

Gore-Tex (W.L. Gore,

Table 1. Clinical Data.

Case	Age	Sex	Diagnosis	Site	Stage	Preop. CTx*/Postop. CTx/RTx†
1	40	M	Giant cell tumor	Humerus	3	-/-/-
2	26	M	Osteosarcoma	Humerus	IIB	-/+/-
3	17	F	Chondroblastoma	Humerus	3	-/-/-
4	15	M	Osteosarcoma	Humerus	IIB	+/+/-
5	20	M	Chondrosarcoma	Scapula	IIB	-/-/-
6	30	F	Chondrosarcoma	Scapula	IIB	-/-/-
7	32	M	Giant cell tumor	Humerus	3	-/-/-
8	38	F	Ewing's sarcoma	Humerus	IIB	-/+/+
9	46	M	Chondrosarcoma	Scapula	IIB	-/-/-
10	42	F	Leiomyosarcoma	Forearm	IIB	-/+/-

* CTx : chemotherapy

† RTx : radiotherapy

1 9 Tikhoff-Linberg
Tikhoff-Linberg

가

1,2,12,21,22) Windhager 22)

3

가

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가

65%

Hand positioning Lifting abil-

ity

Pain, Function, Dexterity

, Emotional acceptance

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3

Gore-Tex

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Abstract

Segmental Resection and Replantation for Primary Malignant or Aggressive Tumors of the Upper Limb

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Object : The aim of the current study is to assess the results of segmental resection and replantation for primary malignant or aggressive tumors of the upper limb.

Materials and Methods : From 1986 to 1994, ten patients who had primary malignant or aggressive tumors of the upper limb were managed with segmental resection and replantation method. The average duration of follow-up was 7 years and 7 months. Primary indication of this method is stage B tumors which, because of their extend, could otherwise be adequately treated only by amputation. Three patients had chondrosarcoma, two had osteosarcoma, two had giant cell tumors with pathologic fracture, one had extensive chondroblastoma, one had Ewings sarcoma, and one had leiomyosarcoma. The location of the tumor was humerus in 6 patients, scapula in 3 patients, and soft tissue of forearm in 1 patient. Wide resection margins were achieved in 7 patients and marginal margin in three.

Results : One patient died on 40 months after surgery due to systemic metastasis. Nine patients have remained disease free without local recurrence or metastasis. The average overall functional rating was 65% (43~90%) for ten patients on the last follow-up by the functional rating system of Enneking. The mean grasping power and pinching power of operative hand was 75%(28~95%) and 65%(43~90%) of the opposite hand, respectively. Complications associated with this surgical method included three wound dehiscences and one nerve injury that resolved with proper wound care and time.

Conclusion : It was concluded that segmental resection and replantation might be used for partial limb salvage in selected cases for the treatment of primary malignant or aggressive tumors of the upper limb.

Key Words : Malignant or aggressive tumor, Upper limb, Segmental resection, Replantation

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