

Table E1: Clinical Features of Multicentric Giant Cell Tumor

Case	Sex	Age at First Tumor Diagnosis (Yrs.)	Location of First Tumor/ Treatment	Location of Second Tumor/ Treatment	Location of Third Tumor/ Treatment	Location of Other Lesions/ Treatment	Subsequent Treatment	Follow-up (from last tumor or recurrence)
1*	M	20	LDF(10/66)/C	LPT(5/70)/C	LDT(5/70)/O	LPH(5/70)/O; LDU(12/73)/Ex;	AKA for recurrent LPT tumor(1/75)	23 mos SLD/NED
2*	M	14	LDF(9/72)/C	LPH(9/72)/O	RPH(9/72)/O	LPT(9/72)/C; LDR(9/72)/O; RDR(9/72)/O; RDF(9/72)/O; RPT(9/72)/O; sphenoid(6/73)/ Partial Ex and XRT	AKA for recurrent LDF and LPT tumor(7/73); AKA for RDF recurrence and path. fracture(10/73)	2 yrs 9 mos SLD/NED
3*	M	21	RDT(11/57)/C	RPFib(4/59)/Ex	---	---	---	No follow-up
4*	F	21	LLC(5/56)/BKA	L1 vertebral body(11/72)/Ex and fusion	---	---	Re-fusion of T12 and L1 for nonunion(6/74)	1 yr 7 mos NED
5*	F	62	C3 vertebral body(1/76)/ Ex and fusion	Ischium(5/76)/Ex	---	---	---	10 mos NED
6*	M	24	LDU(1/51)/C	LPH(7/53)/C	C3 vertebra(5/57)/ XRT	RDU(1/66)/Ex	Ex of LDU recurrent tumor(1/53); Ex of LPH with prosthesis(9/53); cervical fusion(12/60)	25 yrs NED
7*	F	21	RPH(6/65)/C	RPI(3/67)/Ex	---	---	Ex of recurrent RPH tumor with Neer prosthesis(4/67)	35 yrs NED
8*	F	19	Sphenoid(10/64)/Partial Ex + XRT	RPT(1/66)/C	LDR(1/75)/C		XRT for progression of sphenoid tumor(4/66); Ex of recurrent LDR tumor(4/82)	20 yrs NED
9*	F	14	RDF(10/74)/C	RPT(10/74)/C	Skull(6/76)/Partial Ex, XRT, and Chemotx	---	AKA for recurrent RPT tumor(4/75) Fibrosarcoma	32 mos NED
10	F	14	C2 vertebra(11/74)/C	RDR(1/80)/Ex	---	---	C of recurrent C2 tumor, also involved C1 and odontoid(4/76); C of recurrent C2 tumor(9/80); C of recurrent C2 tumor(5/82); C of recurrent C2 tumor(8/84); C of recurrent C2 tumor(10/87)	7 yrs NED
11	F	31	RDR(3/73)/C	LPT(10/85)/C	---	---	Wrist fusion for recurrent RDR tumor(11/73); Ex of recurrent RDR tumor(7/80); Ex of Lung Metastasis (1/81); radiographic evidence of new pulmonary metastases(8/83-12/89)	4 yrs 2 mos without recurrence; Clinically stable pulmonary metastases; died of influenza(12/89)
12	F	16	R navicular(8/83)/C	C7 vertebral body(5/87)/C and fusion	---	---	---	5 yrs NED
13	M	19	RPT(3/95)/C and XRT	R acetab(7/00)/C and Cryo.	RPF(7/01)/C and cryo.	---	C and Cryo for RPT recurrence(10/95); Ex of Lung Metastasis (7/01)	1 yr 6 mos NED

14	M	15	LPT('95)/C	LDT(1/97)/C	LPF(6/97)/C	LDF and L patella fibrohistiocytic tumors	C for LDT recurrence(8/98)	No follow-up
15	---	---	LDU('85)/Ex	LU diaphysis('95)/Ex	LPU('97)/Ex	---	---	No follow-up
16	F	31	LDU(8/88)/Ex	L ilium(5/93)/ Partial Ex	L 7 th rib(7/93)/Ex	---	Ex of LDU soft- tissue recurrence(11/89); Ex of Lung Metastasis (7/93)	No follow-up
17	M	28	LDF(10/91)/C	LPF(2/92)/C	---	---	Ex of LDF recurrence(12/92)	No follow-up
18	F	15	LDF(6/91)/C	LPT(6/91)/C	---	---	---	No follow-up
19	F	13	1 st metacarpal('88)/C	LDR('90)/C	LPH('90)/C	RDR('90)/C, RPH('90)/C	C for 1 st metacarpal recurrence('90)	No follow-up
20	M	25	RDF(5/87)/C	RPT(5/87)/C	---	---	---	No follow-up
21	F	12	C2 vertebral body(11/80)/XRT	LDT(11/80)/C	RDF(11/80)/C	---	Ex of C2 tumor 2/81 and 9/81	1 year NED
22	M	15	RPT(3/71)/C	LDF(12/80)/C	RPF and LPFib(12/80)/O	---	C of RPT recurrence(4/72)	1 year NED
23	F	14	LDF(6/78)/C	LPF(9/78)/C	LDT(11/80)/C	---	Ex of LDF soft- tissue recurrence(4/79); Ex of LPF recurrences('79-9/80)	2 yrs 8 mos NED
24	F	11	R acetab(11/78)/Ex	RD(1/79)/C	---	---	---	2 mos NED
25	M	35	RDF('65)/Ex	RPT('65)/C	LDU(3/78)/C	R 2 nd phalanx(3/78)/C; LPFib(3/78)/C (GCT+ Osteosarcoma)	---	Died of metastatic osteosarcoma(3/79)
26	F	12	L 1 st metatarsal(3/77)/C	LDF(11/77)/C	---	---	C of metatarsal recurrence(5/77); Amp of metatarsal recurrence(8/77)	No follow-up
27	F	14	LDF(11/76)/C	LPT(11/76)/C	LPFib(11/76)/C	---	---	No follow-up
28	F	28	RDR(6/89)/Ex	L ischium/ acetab(8/02)/C	---	---	C of RDR recurrence(9/98)	7 mos NED
29	F	15	RD(12/83)/C	R talus(11/90)/C	RDF(2/93)/Ex	RPT(8/97)/C, M	C of RD recurrence(4/92)	5 yrs 6 mos NED
30	F	18	LDR('75)/C	L 5 th phalanx(2/89)/C	L 1 st metacarpal(10/98)/C	---	Ex LDR recurrence('78)	4 yrs NED

* previously reported

L - left

R - right

Acetab - Acetabulum

LC - lateral cuneiform

DF - distal part of the femur

PF - proximal part of the femur

DT - distal part of the tibia

PT - proximal part of the tibia

PFib - proximal part of the fibula

PH - proximal part of the humerus

DU - distal part of the ulna

PU - proximal part of the ulna

DR - distal part of the radius

PI – proximal part of the ilium

C - curettage

Ex - excision

O - observation

AKA - above-the-knee amputation

BKA - below-the-knee amputation

Cryo - cryotherapy

XRT - radiation therapy

SLD – stable local disease(for tumors managed by observation)

NED – no evidence of disease(for treated tumors)

M - methylmethacrylate