

Table S1 Extracted data from the 91 previously reported cases of glomus tumor associated with bone and joint

Authors	Side	Case	Gender	Cause	Locations	Size (mm)	Age at onset (years)	Sick time (years)	Pathological types	Follow up	Treatment
Glomus tumors around knees: 37 cases											
Amillo S[3]	R	1	F	None	Intramuscular of distal third of vastus lateralis	15 × 30	20	18	Benign	12 mos	Resection
Auerbach F[5]	L	1	M	None	Subcutaneous tissue of inferior of tibial plateau	35 × 22 × 34	73	2	Benign	-	Resection
Puchala M[62]	R/ R	2	M/ F	Injury to patella / twist the knee	Subcutaneous tissue of medial quadrant of the patella / tibial tuberosity	10 × 10 / 15 × 20	64 / 45	5 / 3	Benign Benign	96 mos 6 mos	Resection
Chaabouni S[17]	NR	1	M	None	Subcutaneous tissue fixed to the patella	60 × 50 × 50	71	Several years	Uncertain malignant potential	14 mos	Resection
Panagioto poulos E[56]	-	1		-	Subcutaneous tissue in the medial aspect of the knee	20 × 10 × 20	33	20	Benign	-	Resection
Anley C[4]	R	1	M	NR	Subcutaneous tissue 3 cm proximal to the medial epicondyle	NR	62	6	Benign	3 mos	Resection
Akgun RC[2]	L	1	M	NR	Subcutaneous tissue in front of the patellar tendon	15 × 11 × 20	45	30	Benign	24 mos	Resection
Prabhakar S[60]	R	1	F	NR	In the Hoffa's fat pad	5 × 8	41	1	Benign	15 mos	Resection
Hardy P[32]	R	1	M	None	In the infrapatellar fat pad	10	65	1 week	Benign	-	Resection
Waseem M[77]	R	1	M	None	Subcutaneous tissue of medial condyle of femur	50	70	3	Benign	-	Resection
Okahashi K[53]	L	1	M	None	Subcutaneous tissue of lateral condyle of femur	7 × 6 × 4	51	3	Benign	36 mos	Resection
Frumuseanu B[24]	R	1	M	A fall on his leg	Subcutaneous tissue of medial side of the knee	65 × 35 × 15	10	2 weeks	Benign (Mushroom like)	-	Resection
Goncalves R[29]	L	1	M	None	Subcutaneous tissue of the lateral collateral ligament	NR	43	8	Benign	-	Resection
Clark ML[21]	R/ R/ R/	4	M/ M/ M/	None / None/ NR/	Subcutaneous tissue medial to the patella tendon / subcutaneous	8 × 5/ 15 × 15 × 12/ 4 – 5 /	46/ 64/ 56/	1/ 10months 4/	Benign / Benign / Benign /	-	Resection / Resection / Resection /

	NR		M	None	tissue superior and anterior to the tip of the fibula head / in the infrapatellar bursa / subcutaneous tissue of superolateral aspect of patella	$20 \times 8 \times 4$	65	NR	Benign	-	Resection
Lancerott o L[43]	L	1	M	NR	Subcutaneous tissue of lateral aspect of the intermediate third of leg	$24 \times 20 \times 20$	31	10	Malignant	36 mos	Resection
Bonner TJ[13]	L	1	M	Total knee replacement	Subcutaneous tissue of the anterolateral aspect of knee	$10 \times 8 \times 8$	71	1	Benign	18 mos	Resection
Maxey ML[51]	L	1	M	Minor penetrating injuries	Subcutaneous tissue of the pre-patella	$55 \times 43 \times 27$	48	1	Benign	30 mos	Resection
Kawanami K[37]	L	1	M	NR	In the popliteal fossa	5×5	14	3	Benign	18 mos	Resection
Villegas VV[76]	R	1	M	NR	Subcutaneous tissue anterior to the proximal pole of the patella	41×40	38	12	Benign	-	Resection
El Hyaoui H[23]	R/ L/ R	3	M/ F/ M	None/ None/ None	Subcutaneous tissue of pre-patella / forward of the patellar tendon / anterior to the quadriceps tendon	$7 \times 3 /$ $4 \times 4 /$ 18×10	37/ 39/ 18	1.33/ 1.17/ 4	Benign / Benign / Benign	- / 36 mos / 84 mos /	Resection / Resection / Resection
Mabit C[49]	R	1	M	None	In the patellar Ligament	NR	35	10	Benign	7 mos	Resection
Souza BCE[70]	R	1	M	NR	Subcutaneous tissue of the lower third of thigh	4	45	4.5	Benign	2 mos	Resection
Perks FJ[59]	L	1	F	None	Adherent to the superior lateral genicular nerve (posterior surface of the lateral femoral condyle)	15×8	32	5	Benign	-	Resection
Hermann G[34]	L	1	F	An automobile accident	Confluent with the periosteum of the distal one-third of the posterior aspect of femoral cortex	9×20	35	0.5	Benign	12 mos	Resection
Gonzalez-Llanos F[30]	L	1	M	None	On the periosteum and cortex of lateral aspect of the femoral metaphysis	15×8	48	2	Benign	12 mos	Resection
Chiang ER[19]	R	1	M	None	6 tumors beneath to the gastrocnemius fascia	5 (4 - 40)	31	20	Benign	12 mos RE, 48 mos	Resection / Resection / Resection /

										RE, 60 mos RE, 72 mos RE, 228 mos RE, 276 mos	Resection / Resection
Bahk WJ[7]	R	1	F	Twisted her ankle	In the midshaft of the fibula	40 × 25 × 15	34	1 month	Benign	36 mos	Resection
Kato S[36]	R	1	M	None	In plica synovialis of the lateral side of the lateral femoral condyle	6 × 12 × 16	23	10	Benign	36 mos	Arthroscopic resection
Oztekin HH[55]	L	1	F	None	Lateral to the common peroneal nerve (deep posterior knee capsule)	10 × 15 × 20	9	2 weeks	Benign	18 mos	Resection
Omao M[54]	R	1	NR	None	Subcutaneous tissue behind biceps femoris of middle thigh	NR	37	3	Benign	24 mos	Resection
Our case	R	1	F	None	Confluent with the periosteum of distal third of right femur	10 × 7 × 4	35	7	Benign	4 mos	Resection

Glomus tumors around shoulders: 11 cases

Abela M[1]	R	1	M	None	Subcutaneous tissue of scapula region	10 × 15	42	10	Benign	2 mos	Resection
Boretto J[14]	R	1	F	A minor injury	Intramuscular of distal deltoid muscle	NR	24	30	Benign	6 mos	Resection
Proietti A[61]	L	1	F	None	Between the trapezius and levator scapulae muscles	20 × 40	29	1	Benign	-	Resection
Thanindra tarn P[73]	L	1	M	None	Encasing entire posterior cord of brachial plexus and axillary artery	96 × 112 × 98	47	1	Uncertain malignant potential	24 mos	Resection and Adjuvant radiotherapy
Binesh F[12]	R	1	M	None	Subcutaneous tissue of scapular area	20 × 20	21	1	Malignant	3 mos metastasis in both lungs	Resection, extended local excision + chemotherapy
Sachdev R[66]	R	1	F	None	In the articular cavity of shoulder	30	28	10	Benign	-	Resection
Roberts SN[63]	R	1	M	NR	Deep in the posterior aspect of the shoulder	35 × 30 × 20	47	20	Benign	4 mos	Resection
Geramiza deh B[26]	R	1	F	NR	Supraclavicular region adjacent to periosteum of clavicle	45 × 20	15	10	Benign	6 mos	Resection

Ghaly RF[27]	R	1	M	A fall	Subcutaneous tissue of shoulder and supraclavicular region	9 × 4 × 4	42	20	Benign	24 mos	Resection
Gautam VK[25]	L	1	F	NR	In the acromion process of scapula	-	20	5	Benign	24 mos	Resection
Yoshikawa G[79]	L	1	M	NR	In the tendon of supraspinatus muscle	40 × 20 × 20	15	20	Benign	32 mos	Resection

Glomus tumors around elbows: 4 cases

Zreik N[81]	R	1	M	None	Subcutaneous tissue of posterior medial aspect of the elbow	20 × 20	75	15	Benign	12 mos	Resection
Tomak Y[74]	L	1	F	None	In the triceps tendon	15 × 10	52	4	Benign	12 mos	Resection
Castro WH[16]	L	1	F	None	Subcutaneous tissue of the dorsolateral part of elbow	70 × 50 × 40	50	30	Benign	-	Resection
Burnier M[15]	L	1	F	Left elbow trauma	In the elbow joint synovium	NR	12	12	Benign	4.5 mos	Resection

Glomus tumors around wrists: 2 cases

Najd Mazhar F[52]	L	1	F	None	In the vein of the posterior aspect of the wrist	4 × 9	47	1	Benign	12 mos	Resection
Lee SK[46]	R	1	F	None	In branch of the cephalic vein of the volar-radial aspect of mid-forearm	3	37	7	Benign	6 mos	Resection

Glomus tumors around hips: 2 cases

Hall RM[31]	L	1	M	None	Lying on iliac periosteum	80 × 65 × 40	52	8	Benign	8 mos	Resection
Kobayashi Y[40]	R	1	F	NR	In the lower portion of the sacrum	20	21	1	Benign	-	Resection

Glomus tumors around ankles: 3 cases

Massari L[50]	R	1	F	NR	In the calcaneus close to the posterior subtalar joint	15	36	2	Benign	Mos	Complete resection
Dehghani M[22]	L	1	M	NR	Confluent with periosteum of posterior aspect of the distal tibia	30 × 20	52	7	Benign, (TIHO)	Mos	Complete resection
Sbai MA[67]	R	1	M	NR	Subcutaneous tissue of posterior upper of ankle	17	64	0.5	Benign	12 mos	Resection

Glomus tumors around vertebral body: 9 cases

Zhou P[80]	L	1	M	None	In paravertebral soft tissue into the spinal canal at T12-L1 through the intervertebral foramen	50 × 40 × 33	19	20	Benign	15 mos	Partial resection
Payer M[58]	Bi	1	F	NR	An anterior and bilateral hyperintense epidural mass compressing the spinal cord at T4	50	55	0.25	Benign	-	Complete removal and anterolateral stabilization
Liu T[47]	Bi	1	F	NR	In vertebral body of T3 involving the upper thoracic vertebra of levels T2-T4 and extended through the neural foramen at T3 to the chest cavity	50 × 60	44	1	Benign	24 mos RE, 60 mos	Radiotherapy, resection
Bessho Y[11]	L	1	M	NR	Left posterolateral one-third of the vertebral body of T2 and spinal canal	NR	49	NR	Benign	24 mos	Vertebrotomy of T2 body and reconstruction
Becce F[9]	R	1	F	None	In the right pedicle of T11	15 × 6	72	0.5	Uncertain malignant potential	6 mos	Radiofrequency ablation
Axmann C[6]	R	1	F	NR	Extraforaminal mass growing through the right neural foramen into the spinal canal of lumbar vertebrae 1/2	30 × 20	50	NR	Uncertain malignant potential	12 mos	Resection
Bambakidis NC[8]	L	1	M	NR	Eroding the vertebral body of L3, extending inferiorly posterior to the L4 vertebral body	110 × 110 × 120	43	1	Benign	6 mos	Complete resection and reconstruction of the anterior vertebral column
Kuo CH[42]	Bi	1	M	NR	Epidural intraspinal lesion over T11 level compressing myelopathy	-	26	0.25	Benign	-	Extended local excision
Robinson JC[64]	R	1	F	None	In right pedicle of L1 vertebra	-	41	4	Benign	2 mos	Resection

Glomus tumors around hands: 18 cases

Terada T[72]	L	1	M	NR	Deeply located in the palm	25 × 24 × 22	71	NR	Malignant	12 mos, RE	Resection, Resection
Serra JM[68]	L	1	M	NR	In the head of the third metacarpal	3 × 3	57	NR	Benign	-	Resection
Lorea P[48]	R	1	F	NR	In the radial half of phalanx distal to interphalangeal joint	NR	11	28	Benign	29 mos	The seventh resection

Valero J[75]	L	1	M	NR	In the 5th metatarsal head	$30 \times 30 \times 4$	76	NR	Benign	36 mos	Resection
Kerimoglu U[38]	R	1	F	NR	In the ulnar digital nerve of the fourth finger	NR	9	10 days	Benign	3 mos	Resection
Le Corrolle T[45]	L	1	F	None	In middle phalanx of index finger	NR	51	NR	Benign	-	Resection
Wong TC[78]	R	1	F	NR	In distal phalanx of thumb	5	32	4	Benign	12 mos	Resection
Takase K[71]	R	1	M	NR	In distal phalanx of the index finger	NR	23	7	Benign	6 mos	Resection
Lau YY[44]	R	1	M	Caught in a closing door	In distal phalanx of ring finger	Entire distal phalanx	19	1 mo	Benign	24 mos	Entire distal phalanx resection and toe-to-finger transfer
Simmons TJ[69]	L	1	M	None	In distal phalanx of thumb	Entire distal phalanx	28	2	Benign	-	Entire distal phalanx resection
Rosner IA[65]	L	1	M	None	In distal phalanx of middle finger	$7 \times 4 \times 6$	70	2	Benign	-	Resection
Kiamanes h Z[39]	L	1	F	None	Erosion distal phalanx of index finger	NR	37	4 mos	Benign	-	Resection
Johnson DL[35]	R	1	M	None	In distal phalanx of right thumb	NR	26	1.5	Benign	36 mos	Resection
Harris WS[33]	L	1	M	NR	Erosion distal phalanx of middle finger	NR	56	3	Benign	1 mo	Resection
Chuang GS[20]	R	1	F	NR	In distal phalanx of 5th finger	3	38	NR	Benign	-	Resection
Chan CW[18]	L	1	F	None	In entire distal phalanx of ring finger	Entire distal phalanx	22	20	Benign	-	Resection
Bernardis C[10]	L/ R	2	M/ M	NR/ NR	Adjacent to the 4th metacarpal / the base of the 3rd metacarpal	$34 \times 14 \times 11/$ NR	35 / 20	25 / 8	Benign/ Benign	2 mos/ -	Resection / Resection

Glomus tumors around feet: 5 cases

Kreel L[41]	L	1	F	Moderate trauma	Adjacent to distal phalanx of the great toe	NR	9	8	Benign	-	Resection
Park EA[57]	R/ L/ R	3	F/ F/ M	NR/ NR/ NR	Surface of the plantar arch and both sub-malleolar areas of foot / multiple nodules at the plantar arch / in the third, fourth, and fifth toe tips	NR/ NR/ NR	18/ 40/ 8	7/ 5/ 0.25	Glomangi -omatosis/ Glomangi -omatosis/ multiple glomus tumors	- / 9 mos RE/ -	Resection / Resection / Resection
Gombos	L	1	M	None	In distal phalanx of first	$30 \times 25 \times 20$	20	1	Benign	12 mos	Resection

NA, not available; NR, not record; M, male; F, female; R, right; L, left; RE, recurrence, Mos, months.

References

1. Abela M, Cole AS, Hill GA, Carr AJ (2000) Glomus tumor of the scapular region. *J Shoulder Elbow Surg* 9:532-533
2. Akgun RC, Guler UO, Onay U (2010) A glomus tumor anterior to the patellar tendon: a case report. *Acta Orthop Traumatol Turc* 44:250-253
3. Amillo S, Arriola FJ, Munoz G (1997) Extradigital glomus tumour causing thigh pain: a case report. *J Bone Joint Surg Br* 79:104-106
4. Anley C, Vrettos B, Roche S, Solomons M (2014) A Glomus Tumour of the Elbow: A Case Report and Review of the Literature. *Shoulder Elbow* 6:60-62
5. Auerbach F, Esmer E, Glause T, Gebhard PM, Walz M (2006) [Painful tumour at the knee joint: case report and review of the literature]. *Handchir Mikrochir Plast Chir* 38:129-133
6. Axmann C, Feiden W, Moeller V, Reith W (2005) Paravertebral glomus tumors. *Skeletal Radiol* 34:112-115
7. Bahk WJ, Mirra JM, Anders KH (2000) Intraosseous glomus tumor of the fibula. *Skeletal Radiol* 29:708-712
8. Bambakidis NC, Gore P, Eschbacher J, Coons S, Albuquerque FC (2007) Intraosseous spinal glomus tumors: case report. *Neurosurgery* 60:E1152-1153; discussion E1153
9. Becce F, Richarme D, Letovanec I, Gilgien W, Theumann N (2012) Percutaneous radiofrequency ablation of primary intraosseous spinal glomus tumor. *Skeletal Radiol* 41:467-472
10. Bernardis C, Evans D (2008) Dorsal approach to excision of a deep palmar tumour. *J Plast Reconstr Aesthet Surg* 61:348-351
11. Bessho Y, Kataoka O, Sho T, Kitazawa S, Okada S (1991) Intraosseous glomus tumor in the upper thoracic spine complicating compression myelopathy. A case report. *Spine (Phila Pa 1976)* 16:988-990
12. Binesh F, Akhavan A, Zahir ST, Bovanlu TR (2013) Clinically malignant atypical glomus tumour. *BMJ Case Rep* 2013:
13. Bonner TJ, Fuller M, Bajwa A, Gregg PJ (2009) Glomus tumour following a total knee replacement: a case report. *Knee* 16:515-517
14. Boretto JG, Lazerges C, Coulet B, Baldet P, Chammas M (2008) Calcified glomus tumor of the shoulder. A case report. *Chir Main* 27:183-186
15. Burnier M, Erhard L (2014) [Glomus tumor of volar elbow capsule. Case report]. *Chir Main* 33:67-70
16. Castro WH, de Fijter CW, Kronig OJ, Koudstaal J, Labrie A, Winkelmann W (1989) A rare tumor at the elbow: a glomangioma. Differential diagnosis and therapy. *Arch Orthop Trauma Surg* 108:380-382
17. Chaabouni S, Ayadi L, Kallel R, Khabir A, Chaari C, Abbes K, et al. (2008) Glomus tumour of uncertain malignant potential. *Pathologica* 100:492-493
18. Chan CW (1981) Intraosseous glomus tumor--case report. *J Hand Surg Am* 6:368-369
19. Chiang ER, Chen TH (2008) Multiple glomus tumors in gastrocnemius muscle: a case report.

- Arch Orthop Trauma Surg 128:29-31
20. Chuang GS, Branch KD, Cook J (2012) Intraosseous subungual glomus tumor: a cautionary tale. *J Am Acad Dermatol* 67:e58-60
21. Clark ML, O'Hara C, Dobson PJ, Smith AL (2009) Glomus tumor and knee pain: a report of four cases. *Knee* 16:231-234
22. Dehghani M, Dabbaghmanesh MH, Khalafi-Nezhad A, RiaziMontazer N, Dehghanian A, Vojdani R, et al. (2017) Glomus tumor as a cause of oncogenic osteomalacia. *Clin Cases Miner Bone Metab* 14:359-362
23. El Hyaoui H, Messoudi A, Rafai M, Garch A (2016) Unusual localization of glomus tumor of the knee. *Joint Bone Spine* 83:213-215
24. Frumuseanu B, Balanescu R, Ulici A, Golumbeanu M, Barbu M, Orita V, et al. (2012) A new case of lower extremity glomus tumor up-to date review and case report. *J Med Life* 5:211-214
25. Gautam VK, Agarwal PK, Maini L, Prakash A (2008) Intraosseous glomus tumor in acromion process of scapula. *Orthopedics* 31:406
26. Geramizadeh B, Khorshidi A, Hodjati H (2015) Chronic Long Standing Shoulder Pain, Caused by Glomus Tumor. *Rare Tumors* 7:5666
27. Ghaly RF, Ring AM (1999) SuprACLavicular glomus tumor, 20 year history of undiagnosed shoulder pain: a case report. *Pain* 83:379-382
28. Gombos Z, Fogt F, Zhang PJ (2008) Intraosseous glomus tumor of the great toe: a case report with review of the literature. *J Foot Ankle Surg* 47:299-301
29. Goncalves R, Lopes A, Julio C, Durao C, de Mello RA (2014) Knee glomangioma: a rare location for a glomus tumor. *Rare Tumors* 6:5588
30. Gonzalez-Llanos F, Lopez-Barea F, Isla A, Fernandez-Prieto A, Zubillaga A, Alvarez F (2000) Periosteal glomus tumor of the femur: a case report. *Clin Orthop Relat Res* 199-203
31. Hall RM, Odell JE (1970) An unusually large glomangioma simulating osteoarthritis of the hip. *Jama* 214:1562
32. Hardy P, Muller GP, Got C, Lortat-Jacob A, Benoit J (1998) Glomus tumor of the fat pad. *Arthroscopy* 14:325-328
33. Harris WS (1954) Erosion of bone produced by glomus tumour. *Can Med Assoc J* 70:684-685
34. Hermann G, Klein MJ, Springfield D, Abdelwahab IF, Hoch BL (2005) Glomus tumor of the thigh: confluent with the periosteum of the femur. *Skeletal Radiol* 34:116-120
35. Johnson DL, Kuschner SH, Lane CS (1993) Intraosseous glomus tumor of the phalanx: a case report. *J Hand Surg Am* 18:1026-1028
36. Kato S, Fujii H, Yoshida A, Hinoki S (2007) Glomus tumor beneath the plica synovialis in the knee: a case report. *Knee* 14:164-166
37. Kawanami K, Matsuo T, Deie M, Izuta Y, Wakao N, Kamiya M, et al. (2016) An extremely rare case of a glomus tumor in the popliteal fossa. *J Orthop* 13:313-315
38. Kerimoglu U, Uzumcugil A, Yilmaz G, Ayvaz M, Leblebicioglu G, Altinok G (2007) Intraneural hemangioma of digital nerve diagnosed with MR imaging. *Skeletal Radiol* 36:157-160
39. Kiamanesh Z, Nasiri Z, Jahanpanah P, Shakeri S, Sadeghi R (2018) 99mTC-MDP bone scanning in a subungual glomus tumour. *Nucl Med Rev Cent East Eur* 21:111-112
40. Kobayashi Y, Kawaguchi T, Imoto K, Yamamoto T (1990) Intraosseous glomus tumor in the sacrum. A case report. *Acta Pathol Jpn* 40:856-859
41. Kreel L, Thornton A, Pardy BJ (1986) Glomus tumour of the hallux: diagnosis by Doppler-shift

- ultrasound and digital subtraction angiography. *Postgrad Med J* 62:647-651
42. Kuo CH, Huang WC, Wu JC (2017) Unusual imaging presentation of spinal glomus tumor: case report. *J Spine Surg* 3:715-718
43. Lancerotto L, Salmaso R, Sartore L, Bassetto F (2012) Malignant glomus tumor of the leg developed in the context of a superficial typical glomus tumor. *Int J Surg Pathol* 20:420-424
44. Lau YY, Ho PC, Tse WL, Chow LT, Hung LK (2009) Intraosseous glomus tumor treated by toe-to-finger transfer: case report. *J Hand Surg Am* 34:710-714
45. Le Coroller T, Hargunani R, Khashoggi K, Hayes MM, Clarkson PW, Ouellette HA, et al. (2012) Primary intraosseous glomus tumor in a middle phalanx. *Skeletal Radiol* 41:227-230
46. Lee SK, Song DG, Choy WS (2014) Intravascular glomus tumor of the forearm causing chronic pain and focal tenderness. *Case Rep Orthop* 2014:619490
47. Liu T, Zou W, Kong J, Han S, Wang T, Yan W, et al. (2015) Embolization in the treatment of an intraosseous glomus tumor in the upper thoracic spine complicating compression myelopathy: a case report and a literature review. *Turk Neurosurg* 25:479-484
48. Lorea P, de Fontaine S, Schuind F (1997) Composite big-toe flap of nail, nail matrix, and bone for replacement of a thumb defect: case report. *J Reconstr Microsurg* 13:7-8
49. Mabit C, Pecout C, Arnaud JP (1995) Glomus tumor in the patellar ligament. A case report. *J Bone Joint Surg Am* 77:140-141
50. Massari L, Caruso G, Chinni C, Ferron P, Gaban A, Traina F (2006) Intraosseous glomus tumor of the ankle: a case report and review of the literature. *Foot Ankle Int* 27:1148-1151
51. Maxey ML, Houghton CC, Mastriani KS, Bell RM, Navarro FA, Afshari A (2015) Large prepatellar glomangioma: A case report. *Int J Surg Case Rep* 14:80-84
52. Najd Mazhar F, Shoushtarizadeh T, Mirzaei A (2018) Intravascular Glomus Tumor of the Wrist Causing Chronic Wrist Pain. *J Hand Microsurg* 10:113-115
53. Okahashi K, Sugimoto K, Iwai M, Kaneko K, Samma M, Fujisawa Y, et al. (2004) Glomus tumor of the lateral aspect of the knee joint. *Arch Orthop Trauma Surg* 124:636-638
54. Omar M, Bousselmame N (2017) Tumeur glomique de la cuisse: nouveau cas et revue de la littérature. *Pan African Medical Journal* 28:12827
55. Oztekin HH (2003) Popliteal glomangioma mimicking Baker's cyst in a 9-year-old child: an unusual location of a glomus tumor. *Arthroscopy* 19:E19-23
56. Panagiotopoulos E, Maraziotis T, Karageorgos A, Dimopoulos P, Koumoundourou D (2006) A twenty-year delay in diagnosing a glomus knee tumor. *Orthopedics* 29:451-452
57. Park EA, Hong SH, Choi JY, Lee MW, Kang HS (2005) Glomangiomatosis: magnetic resonance imaging findings in three cases. *Skeletal Radiol* 34:108-111
58. Payer M, Grob D, Benini A, Varga S, Hodler J, Martin JB (2002) Intraosseous glomus tumor of the thoracic spine. Case illustration. *J Neurosurg* 96:137
59. Perks FJ, Beggs I, Lawson GM, Davie R (2003) Juxtacortical glomus tumor of the distal femur adjacent to the popliteal fossa. *AJR Am J Roentgenol* 181:1590-1592
60. Prabhakar S, Dhillon MS, Vasishtha RK, Bali K (2013) Glomus tumor of Hoffa's fat pad and its management by arthroscopic excision. *Clin Orthop Surg* 5:334-337
61. Proietti A, Ali G, Quilici F, Bertoglio P, Mussi A, Fontanini G (2013) Glomus tumor of the shoulder: A case report and review of the literature. *Oncol Lett* 6:1021-1024
62. Puchala M, Kruczynski J, Szukalski J, Lianeri M (2008) Glomangioma as a rare cause of knee pain. A report of two cases. *J Bone Joint Surg Am* 90:2505-2508

63. Roberts SN, Carter C, Brown JN, Hayes MG, Saies A (1999) Enormous glomus tumor of the shoulder. *J Shoulder Elbow Surg* 8:365-366
64. Robinson JC, Kilpatrick SE, Kelly DL, Jr. (1996) Intraosseous glomus tumor of the spine. Case report and review of the literature. *J Neurosurg* 85:344-347
65. Rosner IA, Argenta AE, Washington KM (2017) Unusual Volar Pulp Location of Glomus Tumor. *Plast Reconstr Surg Glob Open* 5:e1215
66. Sachdev R, Mohapatra I, Goel S, Gajendra S (2017) Intra-Articular Glomus Tumor- A Rare Presentation. *Turk Patoloji Derg* 33:175-176
67. Sbai MA, Benzarti S, Gharbi W, Khoffi W, Maalla R (2018) Glomus tumor of the leg: a case report. *Pan Afr Med J* 31:186
68. Serra JM, Muirragui A, Tadjalli H (1985) Glomus tumor of the metacarpophalangeal joint: a case report. *J Hand Surg Am* 10:142-143
69. Simmons TJ, Bassler TJ, Schwinn CP, Forrester DM (1992) Case report 749: Primary glomus tumor of bone. *Skeletal Radiol* 21:407-409
70. Souza BCE, Luce MCA, Sittart JAS, Valente NYS (2018) Extradigital glomus tumor mimicking osteomuscular disease. *An Bras Dermatol* 93:472-473
71. Takase K (2011) Intraosseous glomus tumour in the distal phalanx of the index finger. *J Hand Surg Eur Vol* 36:74-76
72. Terada T, Fujimoto J, Shirakashi Y, Kamo M, Sugiura M (2011) Malignant glomus tumor of the palm: a case report. *J Cutan Pathol* 38:381-384
73. Thanindratarn P, Chobpenthai T, Phorkhar T, Nelson SD (2019) Glomus tumor of uncertain malignant potential of the brachial plexus: A case report. *World J Clin Cases* 7:2815-2822
74. Tomak Y, Dabak N, Ozcan H (2003) Extradigital glomus tumor of the triceps tendon as a cause of elbow pain: a case report. *J Shoulder Elbow Surg* 12:401-402
75. Valero J, Gallart J, Gonzalez D, Deus J, Lahoz M (2016) Giant Glomus Tumor and Neuroma in the Fifth Ray A Case Report. *J Am Podiatr Med Assoc* 106:151-154
76. Villegas VV, Wasserman PL, Cunningham JC, Siddiqi AM (2017) Brace yourself: an unusual case of knee pain, an extradigital glomangioma of the knee. *Radiol Case Rep* 12:357-360
77. Waseem M, Jari S, Paton RW (2002) Glomus tumour, a rare cause of knee pain: a case report. *Knee* 9:161-163
78. Wong TC, Mak Joseph KC, Ip FK (2009) Intraosseous glomus tumour in a distal phalanx. *J Hand Surg Eur Vol* 34:543-545
79. Yoshikawa G, Murakami M, Ishizawa M, Matsumoto K, Hukuda S (1996) Glomus tumor of the musculotendinous junction of the rotator cuff. A case report. *Clin Orthop Relat Res* 250-253
80. Zhou P, Zhang H, Bu H, Yin X, Zhang R, Fu J, et al. (2009) Paravertebral glomangiomatosis. Case report. *J Neurosurg* 111:272-277
81. Zreik N, Talbot C, Peach C (2014) Glomus tumour of the elbow: a case of mistaken identity. *Shoulder Elbow* 6:134-136