Article title: Current trends in the surgical management of Dupuytren's disease in Europe:
an analysis of patient charts
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Questionnaire items

PATIENT'S CHARACTERISTICS

Q1. Date of Birth: _ YYYY
Q2. Gender (Responses: Male/Female)
Q2. Certaer (Responses. Maio/r emaie)
Q3. Ethnicity (Responses: [African/Black]/Asian/[Caucasian/White]; not collected in France and
Sweden)
Q4. Type of health coverage under which patient is being treated for their Dupuytren's
contracture (Responses: [National/Public health insurance]/Private insurance/[No coverage /
100% out of pocket]/Unknown; could indicate as many as appropriate)
Q5. Did the procedure take place in: (Responses: Private hospital/Public hospital)
Q6. How would you describe the patient in terms of his/her dominant hand? (Responses: Left-
handed/Right-handed/Ambidextrous/Unknown)

Q7. How did you classify your patient's profession/employment status at the time of surgery
conducted between September to Dec 2008? (Responses: Unemployed/Retired/[Temporary
disability/sick leave]/Permanent disability/[Non manual labor (Office based)]/Unskilled manual
labor/[Skilled manual labor (e.g. craftman)]/Unknown)

Q8. Has the patient's profession/employment status changed since their surgery for Dupuytren's contracture? (Responses: Yes/No/Don't know)

Q8b. If yes: How do you classify your patient's profession/employment status after the surgery conducted between September to Dec 2008? (Responses: Unemployed/Retired/[Temporary disability/sick leave]/Permanent disability/[Non manual labor (Office based)]/Unskilled manual labor/[Skilled manual labor (e.g. craftman)]/Unknown)

Q10. Does the patient suffer from any co-morbidities or risk factors? (Tick as many as appropriate)

- 1 □ Type 1 Diabetes / IDDM
 2 □ Type 2 Diabetes / NIDDM
 3 □ Consumes more than 3 alcoholic drinks per day
 4 □ Smokes more than 5 cigarettes per day
 5 □ Epilepsy
- 6 \square Non-epileptic seizure disorder

7 ☐ Knuckle pads (Garrod's pads)
8 ☐ Ledderhose
9 □ Peyronie's disease
10 ☐ Past history of trauma on left hand
11 ☐ Past history of trauma on right hand
12□ Previous history of Dupuytren's contracture
13□ Family history of Dupuytren's contracture
14☐ Other comorbidity or risk factor that could exacerbate Dupuytren's contracture:
specify
DIAGNOSIS HISTORY
Q11. To the best of your knowledge, when was this patient first diagnosed with Dupuytren's
contracture?
_ month (MM) / _ _ year (YYYY) (or Unknown)
Q12. Who performed the initial diagnosis? (Responses: Yourself/GP/Orthopedic surgeon/Hand
surgeon/Plastic surgeon/Rheumatologist/)

Q13. Where did the initial diagnosis take place? (Responses: In hospital/In outpatient
department/In physician office outside of hospital/Other: specify/Don't know)
Q14. What were the signs/symptoms for the diagnosis of a Dupuytren's contracture (tick all that apply)?
1 ☐ Lump on the palm or fingers after physical examination
2 ☐ Fingers flexion towards the palm
3 ☐ Positive table top test
4 ☐ Patient's complaint about appearance.
5 ☐ Patient's complaint about functionality
6 ☐ Patient's complaint about pain
7 Other patient complaints, specify
8 Other, specify

Q15-17. In the following table, please tick all the fingers and joints affected at the time of initial diagnosis. Then, for each affected finger at the time of initial diagnosis, please specify the stage of Dupuytren's contracture at that time using the Tubiana's classification of disease.

In the Tubiana scoring classification of Dupuytren's disease severity, the total deformities are measured by adding together the individual flexion deformities (deficiency extension) of the MCP, PIP and DIP joints.

Stage 0 = no lesion, healthy

Stage N = palmar or digital nodule without established flexion deformity

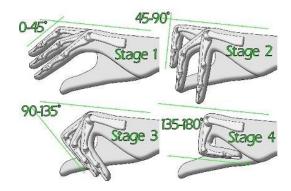
Stage 1a = total flexion deformity between 0° and 20°

Stage 1b = total flexion deformity between 20° and 45°

Stage 2 = total flexion deformity between 45° and 90°

Stage 3 = total flexion deformity between 90° and 135°

Stage 4 = total flexion deformity exceeding 135°



	LEFT HAND					RIGHT HAND				
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb
Q15.										
Please										
specify										
which	1 🗆	2□	3□	4□	5□	6□	7🗖	8□	9□	10□
fingers										
were										
affected at										
time of										

initial										
diagnosis										
(tick as										
many as										
appropriate)										
Q16.										
Please										
specify										
joints										
affected										
DIP		1 🗆	1□	1 🗆	1□	1□	1□	1□	1 🗆	
PIP	2□	2	2□	2 🗖	2 🗖	2 🗆	2□	2□	2	2□
MOD	2□	20	2 🗆	20	20	20	20			
MCP	3□	3□	3□	3□	3 🗖	3□	3□	3□	3□	3□
MCP	3□	3□	3□	3□	3□	3□	3□			
MCP Q17. Stage	3□	3 🗆	3□	3□	3□	3□	3 🗆			
	3 🗖	3 🗖	30	3 🗖	3□	3□	3 🗖			
Q17. Stage	3 🗖	3 🗆	3 🗖	3 🗖	3 🗖	3□	3□			
Q17. Stage	3□	3 🗖	3□	3 🗖	3□	3□	3 🗖			
Q17. Stage of Dupuytren's	3 🗖	3 🗖	3 🗖	3 🗖	3 🗖	3□	3□			
Q17. Stage of Dupuytren's Disease at	3□	3 🗖	3 🗆	3 🗖	3 🗆	3 🗆	3 🗖			

(total finger										
flexion										
adding up										
all the joints										
affected)										
N (Nodules)	1 🗖	1 🗆	1 🗆	1	1□	1□	1 🗖	1□	1□	1□
la (< 20°)	2	2	2	2	2	2	2	2	2	2
lb (20 –	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□
45°)	<u> </u>	<u> </u>	<u> </u>	•	•		<u> </u>	<u> </u>	<u> </u>	<u> </u>
II (45° -	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□
90°)										
III (90° -	5□	5□	5□	5□	5□	5□	5□	5□	5□	5□
135°)										
IV (>135°)	6	6□	6	6	6	6□	6	6□	6□	6□

Q18. Only if fingers at stage N (nodule) at time of diagnosis (Q17=1), when did the first flexion occur?

|__|_ | month (MM) / |__|_ | year (YYYY)

2□ No known progression to flexion

1□ Unknown

Q19. Do you know if the Dupuytren's contracture was coded under a Diagnosis Related Grou
(DRG) (or equivalent)? (Responses: Yes/No/Don't know)
If yes, please provide the DRG Code (or equivalent)?

Q20. At time of diagnosis, did the patient report any of the following hand function limitations in his/her daily life?

	Q20a. Tick	
	if functional	Q20b. If ticked in Q20a:
	limitation	Did the patient complain of these
	existed at	functional limitations?
	diagnosis:	
Work activities in general	10	1□ Yes 2□ No 3□ Don't know
Leisure activities in general	2	1□ Yes 2□ No 3□ Don't know
Washing or grooming	3□	1□ Yes 2□ No 3□ Don't know
Shaking hands	4□	1□ Yes 2□ No 3□ Don't know
Placing hand in pocket	5□	1□ Yes 2□ No 3□ Don't know
Putting on a glove	6□	1□ Yes 2□ No 3□ Don't know
Difficulty using fingers to grasp objects	70	1□ Yes 2□ No 3□ Don't know
Applauding	8 🗆	1□ Yes 2□ No 3□ Don't know
Using a computer or typing	9🗆	1□ Yes 2□ No 3□ Don't know

Recreational or sport activities such as golf or	10□	1□ Yes 2□ No 3□ Don't know						
tennis		Ta res 2a No 3a Doirt Know						
Baking	11□	1□ Yes 2□ No 3□ Don't know						
Playing a musical instrument	12□	1□ Yes 2□ No 3□ Don't know						
Gardening	13□	1□ Yes 2□ No 3□ Don't know						
Other: Specify	14□	1□ Yes 2□ No 3□ Don't know						
Other: Specify	15□	1□ Yes 2□ No 3□ Don't know						
The patient reported no impact on their life	16□							
REFERRAL HISTORY								
Q21. Was the patient referred to you by another patient	ohysician? (Re	sponses: Yes/No)						
Q22. (If Q21 is Yes) What was the specialty of th	e physician wh	o referred this patient to you?						
1 General Practitioner / Primary Care F	ractitioner							
2 🗖 Internal Medicine Physician								
3 ☐ Geriatrician								
4 ☐ Rheumatologist								
5 🗖 Orthopedic Surgeon								

6 Orthopedic surgeon specializing in hand surgery
7 🗖 Plastic Surgeon
8 ☐ Plastic Surgeon specializing in hand surgery
9 Other (please specify)
Q23. (If Q21 is Yes) When was this patient referred to you?
_ month (MM) / _ _ year (YYYY)
Q24. (If Q21 is Yes) What was the principal reason for referring this patient to you?
1 ☐ Patient needed procedure
2 ☐ Patient needed medical treatment
3 ☐ Diagnosis was required or needed to be confirmed
4 Physician seeing the patient did not feel comfortable prescribing/making treatment
decisions
5 🗖 Other (please specify):

PROCEDURE PERFORMED BETWEEN SEPTEMBER AND DECEMBER 2008

between September and December 2008
Q25a. Date of this surgery? (Responses: September 2008/October 2008/November
2008/December 2008)
Q25b.Where was the procedure performed?
1 ☐ In hospital as in-patient (go to Q26)
2 ☐ In hospital as out-patient (go to Q27).
3 ☐ In hospital as out-patient day case (go to Q27).
4 ☐ Out of hospital
Q26. If the patient was an in-patient (Q25b=1), how many nights did the patient spend in the
hospital?
nights
☐ Don't know?

Q27. If the patient was treated as an out-patient or in the day case setting (Q25b=2 or 3), how

many hours did the patient spend in the hospital / out-patient ward?

In this section of the questionnaire, we would like to focus on the procedure performed

hours
☐ Don't know?
Q28. Was the Dupuytren's Contracture procedure coded under ICD 10 / OPCS (in the UK) or an
equivalent system?
□ Yes □No
If yes, please provide the Code

Q29. Please specify which fingers were operated on (tick as many as appropriate)

		L	EFT HAN	D		RIGHT HAND								
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb				
Q29	1 🗆	2	3□	4□	5□	6□	7🗖	8□	9🗖	10□				

For each operated finger please specify:

Q30. Joints treated by the procedure

		L	EFT HAN	D		RIGHT HAND							
DIP	Thumb	ndex	Middle	Ring	Baby	Baby	Ring	Middle 🗖	ndex	Thumb			
PIP	2	2	2	2	2	2□	2	2	2	2			

MCP	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□	
											ĺ

Q31. Stage of Dupuytren's contracture at time of the procedure (total finger flexion adding up all the joints affected)

		LEI	FT HA	ND			RIG	HT H	AND	
	gwnu i	Index	Middle	King	Бару	baby	King	Middle	Index	Thumb
N (Nodules)	1	10	1	1	1	1	1	1	1	1□
la (< 20°)	2	2	2	2	2	2	2	2	2	2
lb (20° – 45°	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□
II (45° - 90°)	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□
III (90° - 135°)	5□	5🗖	5□	5□	5□	5□	5□	5□	5□	5□
IV (>135°)	6□	6□	6□	6□	6□	6□	6□	6□	6□	6□

Q32. Type of procedure performed

		LEI	FT HA	ND			RIG	НТ Н	AND	
	gwnu	Index	Middle	King	Saby	Saby	King	Aiddle	ndex	humb
Needle Fasciotomy/aponeurotomy	10	10	10	10	10	10	10	10	10	10

	Fasciotomy (subcutaneous or open)	2□	2□	2	2	2	2	2	2	2	2
	Fasciectomy/Aponeurectomy	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□
	Dermofasciectomy	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□
	Amputation	5□	5□	5□	5□	5□	5□	5□	5□	5□	5□
	Other specify:	6□	6□	6□	6□	6□	6□	6□	6□	6□	6□
Q33	. Duration of the procedure performed:	L	r	minute	s or	<u> </u>	ho	urs			
Q34	Has this patient received any previous	proc	edure	on th	e <u>sam</u>	<u>e</u> fing	er or j	oint(s)) from	yours	elf or
any	other physician?										
10	Yes go to Q35.										
2🗖	No or not to my knowledge <i>go to Q38.</i>										

Q35. If yes in Q34, what was the previous procedure used on the same finger/joint

		LE	FT HA	ND			RIG	HT H	AND	
	amnu I	Index	Middle	King	Бару	рару	King	Middle	Index	amnuı
Needle Fasciotomy/aponeurotomy	1	1	1□	1	1	1	1	1	1	1

Fasciotomy (subcutaneous or open)	2	2	2	2	2	2	2	2	2	2
Fasciectomy/Aponeurectomy	3□	3□	3□	3□	3□	3	3□	3□	3□	3□
Dermofasciectomy	4□	4□	4□	4□	4□	4	4□	4□	4□	4□
Other specify:	5□	5□	5□	5□	5□	5	5□	5□	5□	5□
Q36. When did this last previous procedure _ month (MM) / _ _ y										
Q37. Who decided upon/performed this prev	vious _l	proced	dure?							
1 ☐ Yourself										
2 □ GP										
3 ☐ Orthopedic Surgeon										
4 🗖 Orthopedic surgeon specializing	j in ha	nd su	rgery							

5 ☐ Plastic surgeon
6 ☐ Plastic Surgeon specializing in hand surgery
7 ☐ Rheumatologist
8 Other (please specify)
9 □Don't know
PROCEDURE FOLLOW-UP (for the procedure performed between September and
December 2008)
Q38. What type of immediate post-operative dressing/splint was applied? (Responses: Light
dressing/Bulky bandage/Plaster slab/Thermoplastic splint/Other: specify/None; multiple answers
possible)
Q39. (Except if "none" in Q38) how long was it used?
days
☐ Don't know?
Q39bis. a) Was a Night Splint used? (Responses: Yes/No/Don't know)
b) (if yes) How long was it used?

nights
☐ Don't know?
Q40. <u>During the procedure</u> performed between September and December 2008, were there any
complications associated with the procedure? (Tick as many as appropriate)
1 ☐ None
2 Artery injury
3 ☐ Nerve injury
4 ☐ Tendon injury
5 ☐ Volar plate injury
6 ☐ Other. Please specify
Q41. After the procedure performed between September and December 2008, were there any
post-operative complications associated with this specific procedure? (Tick as many as
appropriate)
1 None
2 Infection
3 ☐ Hematoma
4 ☐ Complex Regional Pain Syndrome (CRPS) or Reflex Sympathetic Dystrophy or
Algodystrophy
5 ☐ Inflammation

6 ☐ Finger required amputation
7 🗖 Abnormal sensitive reactions (Dysesthesia, Paresthesia, Allodynia)
8 ☐ Necrosis
9 □ Pain
10 ☐ Carpal tunnel syndrome / Ulnar nerve compression (eg cubital tunnel syndrome)
11 Wound healing complications / delayed healing
12 Other (specify):
☐ Don't know?
Q42. If this patient experienced post operative complications, did the patient have to be readmitted in hospital to manage the complications? (Responses: Yes/No/Don't know)
Q43. If yes in Q42, how many times has the patient been re-admitted to manage complications
of their Dupuytren's contracture procedure?
times
☐ Don't know?
Q44a. How did you assess the effectiveness of the procedure?
1 ☐ By measuring the post-operative flexion or extension

2 By conducting a table top test
3 ☐ By assessing the patient's functional ability post surgery
4 Other (please specify)
Q44b. How would you describe the clinical outcome of the procedure perfored?:
1 ☐ it had a positive outcome
2 ☐ it had no effect on the degree of contracture
3 ☐ it had a negative outcome
Q45. How long did it take to obtain the optimal hand function result following the procedure
(taking into account that all patients may not fully regain their optimal hand function)?
months

Q46. What was the optimal result obtained following surgery? (stage of Dupuytren's Disease of **the operated fingers**; total finger flexion adding up all the joints affected)

		L	EFT HAN	D			RI	GHT HAN	ND	
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb

No nodule										
nor	1□	1□	1 🗖	1 🗖	1□	10	1□	1 🗖	1 🗖	1□
N	2	2	2	2	2□	2	2	2	2	2
(Nodules)										
la (< 20°)	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□
Ib (20° - 45°)	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□
II (45° - 90°)	5□	5□	5□	5□	5□	5□	5□	5□	5□	5□
III (90° - 135°)	6□	6□	6□	6□	6□	6□	6□	6□	6□	6□
IV (>135°)	7🗖	7🗖	7🗖	7🗖	7🗆	70	7🗖	7🗖	7🗖	7🗖

Q47. Were the hand function limitations expressed by the patient at the diagnosis stage resolved after treatment? (see items in Q20):

	Yes	No	Don't
			Know
Work activities in general	1□	2	3□
Leisure activities in general	1□	2□	3□

Washing or grooming	1□	2	3□
Shaking hands	1□	2□	3□
Placing hand in pocket	1□	2□	3□
Putting on a glove	1□	2	3🗖
Difficulty using fingers to grasp objects	1□	2□	3□
Applauding	1□	2	3🗖
Using a computer or typing	1□	2	3□
Problems with recreational or sport activities such as golf or tennis	10	2□	3□
Baking	1□	2□	3□
Playing a musical instrument	1□	2□	3□
Gardening	1□	2□	3□
Include "Other.1" from Q20	1□	2□	3□
Include "Other.2" from Q20	1□	2□	3 🗖

Q48. Following the procedure, who else managed the patient for the Dupuytren's Disease? (tick all that apply)

1 No one else but me

2 □ GP
3 ☐ Orthopedic Surgeon
4 ☐ Hand surgeon
5 ☐ Plastic surgeon
6 ☐ Rheumatologist
7 D Physiotherapist / occupational therapist
8 Other (please specify)
Q49. How many clinical visits since the procedure did you see this patient for his/her
Dupuytren's contracture follow-up?
times
Q50a. Has there been any other procedure conducted since the procedure for Dupuytren's
contracture? (Responses: Yes/No)
Q50b. If Yes, specify if it was:
1 ☐ A recurrence on the same finger/same joints
2 A procedure on other joints because of disease progression or extension on other
joints

3 🗖 A procedure on o	other joints that was	initially planned but	had to be delayed
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Q50c. if a procedure was conducted on the same finger and same joints:

c1. When did this treatment take place?

	month	(MM)) /	I	l		١	year (Ύ	Y	Y	١
	 		, ,		 		Ι.	, ,			• /	,

c2. What was the stage of Dupuytren's Disease of the operated fingers at the time of this new procedure? (total finger flexion adding up all the joints affected)

		L	EFT HAN	D			RI	GHT HAN	ND	
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb
N (Nodules)	1□	1□	1□	1□	10	10	1□	1□	1□	1□
la (< 20°)	2	2□	2□	2□	2□	2□	2□	2□	2	2
Ib (20° - 45°)	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□
II (45° - 90°)	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□
III (90° - 135°)	5□	5□	5□	5□	5□	5□	5□	5□	5□	5□
IV (6□	6□	6□	6□	6□	6□	6□	6□	6□	6□

>135°)					

Q50d. if no procedure was conducted on the same finger and same joints:

d1. When did you last reevaluate the operated finger and joints?

	month	(MM)) /			l y	ear ((Y)	Y	Y)

d2. What was the stage of Dupuytren's Disease of **the operated fingers at the time of this last re-evaluation**? (total finger flexion adding up all the joints affected) (possibly no contracture anymore)

		L	EFT HAN	D	RIGHT HAND						
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb	
No											
contracture nor nodule	1 🗆	1 🗆	1□	1□	1□	10	1 🗖	1□	1□	1□	
N	2□	2□	2	2	2□	2□	2□	2□	2	2□	
(Nodules)											
la (< 20°)	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□	
Ib (20° - 45°)	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□	
II (45° -	5□	5□	5□	5□	5□	5□	5□	5□	5□	5□	

	90°)										
	III (90° - 135°)	6□	6□	6□	6□	6□	6□	6□	6□	6□	6□
IV	(>135°)	7□	7	70	7□	7🗆	70	7□	7	7🗆	7🗆

FUTURE TREATMENTS PLANNED

Q51. Do you plan to apply a treatment to any hand in the **coming 12 months**?

	LEFT HAND						RIGHT HAND						
	Thumb	Index	Middle	Ring	Baby	Baby	Ring	Middle	Index	Thumb			
No treatment	1□	1□	1□	1□	1□	1□	1□	1□	1□	1□			
planned / I do not													
know yet													
Needle													
Fasciotomy/aponeur	2	2	2	2	2	2□	2	2	2	2			
otomy													
Fasciotomy													
(subcutaneous or	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□			
open)													
Fasciectomy/Apone	4□	4□	4□	4□	4□	4□	4□	4□	4□	4□			
urectomy	40	40	40	49	40	43	40	40	40	43			
Dermofasciectomy	5□	5🗖	5□	5□	5	5□	5🗖	5□	5🗖	5□			
Steroid Injections	6□	6□	6□	6□	6□	6□	6□	6□	6□	6□			
Amputation	70	70	70	70	70	70	70	70	70	7🗆			

Radiotherapy	8□	8□	8□	8□	8□	8□	8□	8□	8□	8🗖		
Other,	90	90	90	90	9🗖	90	90	90	90	9🗆		
Q52. When do you plan to carry out this treatment?												
0-3 months	1□	1	1	1□	1□	1□	1	1	1	1□		
In 3 to 6 months	2□	2□	2□	2□	2□	2□	2	2□	2□	2		
In 6 to 12 months	3□	3□	3□	3□	3□	3□	3□	3□	3□	3□		
Q53. Are you planning to refer the patient to another physician or surgeon for treatment of their Dupuytren's contracture? 1 □ Yes (go to Q54) 2 □ No (please fill another patient case record form)												
Q54. If yes in Q53, what physician do you expect to refer this patient to for treatment?												
1 Orthopedic Surgeon												
2 ☐ Hand Specialist												
3 ☐ Plastic Su	rgeon											
4 ☐ Rheumatologist												

5 Other (please specify)_____