

University Hospitals Bristol

# COMPLEX MOVEMENT DISORDER DBS CLINICAL PATHWAY BOOKLET

Hospital Number:	Next of kin/Guardian:
Name:	
Address:	Relationship:
Address.	CP Register:
	Social Worker:
Sex: DOB:	
Telephone/Mobile:	School:
Email:	
Consultant:	
GP:	GP Telephone/e-mail:
Family Tree:	
,	
ASSESSMENTS:	
Referral Date:	Initial CMD Clinic Date:
Baseline PT Assessment:	Pre-op:
Goal setting & MDT:	Enhanced MRI:
CPChild: Pre-op 3/12 6/12	🖵 1year 🔄 🛛 2Year 🖵
TRANSITION TO ADULT SERVICES:	
Year of planned Transition:	Centre:
Initial discussion with family: Date:	Ву:
Referral Date:	
Named Consultant:	NHS Trust:
Paperwork completed: Date:	By:
Paperwork sent: Date: By:	
DBS IMPLANT DETAILS:	
Implant Date	
Implant Centre	
Implant make	
Implant activation date	
WRITTEN INFORMATION GIVEN :	

# **PROFESSIONALS INVOLVED:**

Community Paediatrician:

Name:	Address:
Tel No.:	
Email:	

### Paediatrician:

Name:	Address:
Tel No.:	
Email:	

### Neurologist:

Name:	Address:
Tel No.:	
Email:	

# Orthopaedic Surgeon:

Name:	Address:
Tel No.:	
Email:	

### **Physiotherapist:**

Name:	Address:
Tel No.:	
Email:	

### OT:

Name:	Address:
Tel No:	
Email:	

### Other:

Name:	Address:
Tel No.:	
Email:	

# **INITIAL OUTPATIENT APPOINTMENT**

Clinic date:	Referrer:
Consultant:	Speciality:
CCG Area:	GMFCS level:

<u>PC</u>	
<u>HPC</u>	
<u>PMH</u>	
Investigations:	

lame:
-------

Medications:	
Previous interventions / Surgery	
SH:	

ıme:
------

O/E:
------

.

Impression:		
Plan:		
	Signed	Designation
		Date:

# PHYSIOTHERAPY ASSESSMENT

Date: .....

Mobility/Transferring	
Positioning/ Seating Tolerance	
Fouriement	Standing frames V N
Equipment	Standing frame: Y N Specialist seating: Y N
	Orthotics:
	Other:
Care giving	CPChild
Sleeping	Sleep system: Y N
Pain	

Name:	Hospital $N^{\circ}$ :
UL function	
Continence	
Communication	
Drooling/eating/drinking	

Signed:	Designation
GMC/NMC N°:	Date:

# **OBJECTIVE ASSESSEMENT**

### Position:

### Current Medication

	SPASTICI	ТҮ	MUSCLE STRENGTH					
	Spastic	ity	y Dystonia		(oxf	(oxford scale)		
HIP	R	L	R	L	HIP	R	L	
EXTENSORS					EXTENSION			
FLEXORS					FLEXION			
ABDUCTORS					ABDUCTORS EXT			
ADDUCTORS					ADDUCTION			
KNEE								
EXTENSORS					KNEE			
DUNCAN ELY					EXTENSION			
FLEXORS					FLEXION			
ANKLE					ANKLE			
PLANTERFLEXORS					PLANTERFLEXION			
DORSIFLEXORS					DORSIFLEXION			
TIB. POST.								

### SPASM SCALE

1	2	3	4
		_	

# <u>B.A.D – Dystonia Scale:</u>

Eyes	Mouth	Neck	Truck	R UL	LUL	R LL	LLL

Name: .....

### **PASSIVE RANGE OF MOVEMENT:**

Date & Time						
	Right	Left	Right	Left	Right	Left
Hip Flexion						
Hip Extension						
Hip Abduction						
Hip Adduction						
Knee Flexion						
Knee Extension						
Ankle Dorsiflexion						
Ankle Plantarflexion						
Shoulder Flexion						
Shoulder Extension						
Shoulder Abduction						
Shoulder Adduction						
Elbow Flexion						
Elbow Extension						
Elbow pronation/supination						
Wrist Flexion						
Wrist Extension						
Finger Flexion						
Finger Extension						
DBJECTIVE:						
Outcome measure		Compl	eted (date)	Ву		
Dyskinessia Impairmer	nt Scale					
Burke-Fahn-Marsden I	Dystonia sca	le				

GOAL	SETTING:	
------	----------	--

BAD

TUG

6MWT

GMFM

Name: Date				
		<u> </u>		
Occupational Performance Problem	Р	S	Р	S

Name: .....

P – performance

S – satisfaction

Hospital N°: .....

Name:	
-------	--

# **MDT SUMMARY**

Clinicians Present:

Comment:

Signed: ..... Designation .....

Name:	Hospital N°:
GMC/NMC N°: Date:	

# **PRE-OPERATIVE ASSESSMENT** (Paediatrician/Paediatric ANP to complete)

Date:	Age:	Weight:	Height:	BSA:		
Reason for admission: Intrathecal Baclofen test dose and implantation of intrathecal pump						
Temp:	Pulse:	Resp:	SpO <sub>2</sub> :	BP:		
H <sub>x</sub> PC:		l				
PMH <sub>x</sub> :						

Drug H<sub>x</sub>:

FH<sub>x</sub>:

SH<sub>x</sub>:

		Hospital N <sup>°</sup> :
<u>O/E:</u> <b>CVS</b> :		
CV3.		
Resp:		
Abdo:		
Date:		Signature:
Eute.	Name:	5.5.10tol C.
	Designation:	

# Specialist Opinion (Anaesthetist/Cardiologist)

Reason for ref	Reason for referral (& to whom):						
Date & Time:					Signatu	ire.	
Dute & fille.					Jightee	ire.	
Outcome with	inst	tructions:					
Date & Time:					Signatu	ire:	
Investigation	Da	te:	Indication:	Signature:		Results:	
MRSA	Da	ιε.		Signature.		Nesults.	
Bloods							
Abnormal resu	lts:	' Action tal	ken/Comments:				
			Date & Tim	ie:			Signature:
Date & Time:			Additional Not	·			Name & Signature:
Date & fille.			Additional No	.03.			

Signed:	Designation
GMC/NMC N°:	Date:

# **NURSING & MEDICAL NOTES**

Date &	Signature &
Time	Signature & Designation

Hospital N°:

Name:		Hospital N <sup>o</sup> :		
Date & Time		Signature & Designation		
Time				

Date & Time	Signature & Designation

# **IMPLANTATION PHASE**

# **NURSING & MEDICAL NOTES**

Date & Time	Signature & Designation

Hospital N°:

Name:		Hospital N <sup>o</sup> :		
Date & Time		Signature & Designation		
		Designation		
		_		

Hospital N°:

Name:		Hospital N <sup>o</sup> :		
Date & Time		Signature & Designation		
Time				

# **PHYSIOTHEARPY & NURSING DISCHARGE PLANNING**

Name: .....

PHYSIOTHERAPY ADDITIONAL D/C INFORMATION

PHYSIOTHERAPY CHECKLIST – PRIOR TO DISCHARGE					Initials
Report to local physiotherapist			YES	NO	
DBS leaflet(s) given and explained			YES	NO	
Discussion of physiotherapy role in ongoing assessments			YES	NO	
COMMENTS:					
DISCHARGE DATE	DISCHARGE DATE SIGNATURE OF				
& TIME		DISCHARGE NURSE			
NURSING CHECKLI	ST – PRIOR TO DISCHARGE				Initials
Vital signs stable?			YES	NO	
Fully conscious?			YES	NO	
Has taken diet and flui	ds post operatively?		YES	NO	
Has passed urine?			YES	NO	
Has adequate analgesia on board?			YES	NO	
Parent/carer aware of	post-operative instructions?		YES	NO	
Date may wash hair					
Wound check? If not why not?			YES	NO	
Dressing clean & dry?			YES	NO	
Cannula removed?			YES	NO	
Parent/carer aware of who to contact with concerns?			YES	NO	
Health Visitor/School Nurse Contacted?			YES	NO	
GP Contacted?			YES	NO	
Follow up information given to parent/carer? (If NO, why not?)			YES	NO	
COMMENTS:				•	
DISCHARGE DATE SIGNATURE OF					
& TIME	TIME DISCHARGE NURSE				

Name: .....

Hospital N°: .....

# APPENDIX

<u>Spasm Scale:</u>

Please circle appropriate score.

- 0 No spasm
- 1 No spontaneous spasm, vigorous sensory and motor stimulation results in spasms.
- 2 Occasional spontaneous spasms and easily induced spasms.
- 3 More than 1 but less than 10 spontaneous spasms per hour.
- 4 More than 10 spontaneous spasms per hour.

### Modified Ashworth Score of Spasticity:

- 0 No increase in muscle tone.
- 1 Slight increase in muscle tone manifested by a catch and release or by minimal resistance at the end of range of motion.
- 1<sup>+</sup> Slight increase in muscle tone manifested by a catch followed by minimal resistance throughout the remainder (less than half) of the ROM.
- 2 More marked increase in muscle tone through most of the ROM, but the affected part is easily moved.
- 3 Considerable increase in muscle tone, passive movement is difficult.
- 4 Affected part is rigid in flexion or extension, abduction or adduction.

### Barry-Albright Dystonia Scale

Eyes: signs of dystonia of the eyes include: prolonged eyelid spasms and/or forced eye deviations

- 0- Absent
- 1- Slight: dystonia less than 10% of the time and does not interfere with tracking
- 2- Mild: frequent blinking without prolonged spasms of eyelid closure, and/or eye movements less than 50% of the time
- 3- Moderate: prolonged spasms of eyelid closure, but eyes open most of the time, and/or eye movements more than 50% of the time that interfere with tracking, but able to resume tracking
- 4- Severe: Prolonged spasms of eyelid closure, with eyelids closed at least 30% of the time, and/or eye movements more than 50% of the time that prevent tracking
- 5- Unable to assess eye movements

**Mouth:** signs of dystonia of the mouth include grimacing, clenched or deviated jaw, forced open mouth, and/or forceful tongue thrusting

- 0- Absent
- 1- Slight: dystonia less than 10% of the time and does not interfere with speech and/or feeding
- 2- Mild: dystonia less than 50% of the time and does not interfere with speech and/or feeding
- 3- Moderate: dystonia more than 50% of the time and/or dystonia that interferes with speech and/or feeding
- 4- Severe: dystonia more than 50% of the time and/or dystonia that prevents speech and/or feeding
- 5- Unable to assess mouth movements

**Neck:** signs of dystonia of the neck include pulling of the neck into any plane of motion: extension, flexion, lateral flexion or rotation

- 0- Absent
- 1- Slight: pulling less than 10% of the time and does not interfere with lying, sitting, standing and/or walking
- 2- Mild: pulling less than 50% of the time and does not interfere with lying, sitting, standing and/or walking
- 3- Moderate: pulling more than 50% of the time and/or dystonia that interferes with lying, sitting, standing and/or walking
- 4- Severe: pulling more than 50% of the time and dystonia that prevents sitting in a standard wheelchair (e.g. requires special head rest), standing and/or walking
- 5- Unable to assess neck movements

Name: ..... Hospital N<sup>o</sup>: .....

**Trunk:** signs of dystonia of the trunk include pulling of the trunk into any plane of motion: extension, flexion, lateral flexion or rotation

- 0- Absent
- 1- Slight: pulling less than 10% of the time and does not interfere with lying, sitting, standing and/or walking
- 2- Mild: pulling less than 50% of the time and does not interfere with lying, sitting, standing and/or walking
- 3- Moderate: pulling more than 50% of the time and/or dystonia that interferes with lying, sitting, standing and/or walking
- 4- Severe: pulling more than 50% of the time and dystonia that prevents sitting in a standard wheelchair (e.g. requires adapted seating system), standing and/or walking
- 5- Unable to assess trunk movements

**Upper extremities:** signs of dystonia of the upper extremities include sustained muscle contractions causing abnormal postures, score each limb separately

- 0- Absent
- 1- Slight: dystonia less than 10% of the time and does not interfere with normal positioning and/or functional activities
- 2- Mild: dystonia less than 50% of the time and does not interfere with normal positioning and/or functional activities
- 3- Moderate: dystonia more than 50% of the time and/or dystonia that interferes with normal positioning and/or upper extremity function
- 4- Severe: dystonia more than 50% of the time and/or dystonia that prevents normal positioning and/or upper extremity function (e.g. arms restrained to prevent injury)
- 5- Unable to assess upper extremity movements

**Lower extremities:** signs of dystonia of the upper extremities include sustained muscle contractions causing abnormal postures, Score each limb separately

- 0- Absent
- 1- Slight: dystonia less than 10% of the time and does not interfere with normal positioning and/or functional activities
- 2- Mild: dystonia less than 50% of the time and does not interfere with normal positioning and/or functional activities
- 3- Moderate: dystonia more than 50% of the time and/or dystonia that interferes with with normal positioning and/or lower extremity weight bearing and/or function
- 4- Severe: dystonia more than 50% of the time and/or dystonia that prevents normal positioning and/or lower extremity weight bearing and/or function
- 5- Unable to assess lower extremity movements

Name	Hospital No	Date
Completed by	Designation	Prof Reg N°

# FAHN-BURKE MARSDEN DYSTONIA SCALE

REGION	ACTION			REST		
	Single activity	Duration factor	Amplitude factor	Single position	Duration factor	Amplitude factor
		0-1-2-3-4	0-1-2-3-4		0-1-2-3-4	0-1-2-3-4
ye dystonia	Eye tracking			Sitting position		
	Eye blinking					
Eye choreoathetosis	Eye tracking			Sitting position		
	Eye blinking					
Aouth dystonia	Mouth open/closed			Sitting position		
	Speech					
Nouth choreoathetosis	Mouth open/closed			Sitting position		
	Speech					
Neck dystonia	Lateral flexion R/L			Sitting position		
	Rotation R/L					

Name		Hospital No	Date
Completed by		Designation	Prof Reg N <sup>o</sup>
Neck choreoathetosis	Lateral flexion R/L	Sitting position	
	Rotation R/L		
Trunk dystonia	Forward flexion	Sitting position	
Trunk choreoathetosis	Forward flexion	Sitting position	
Right arm proximal dystonia	Arm abduction	Sitting position	
Right arm proximal choreoathetosis	Arm abduction	Sitting position	
Left arm distal dystonia	Grasp and move a cup	Lying position	
	Grasp and move a pen		
Left arm distal choreoathetosis	Grasp and move a cup	Lying position	
	Grasp and move a pen		

Name		Hospital No	Date
Completed by		Designation	Prof Reg N°
Right leg proximal dystonia	Rolling	Lying position	
	Standing		
Right leg proximal choreoathetosis	Standing	Lying position	
	Rolling		
Left leg proximal dystonia	Standing	Lying position	
	Rolling		
Right leg proximal choreoathetosis	Standing	Lying position	
	Rolling		
Left leg distal dystonia	Rolling	Lying position	
	Heel/toe raising		
Right leg distal choreoathetosis	Rolling	Lying position	
	Heel/toe raising		

Name		Hospital No	Date	
Completed by		Designation	Prof Reg N <sup>o</sup>	
left leg distal dystonia	Rolling	Lying position		
	Heel/toe raising			
Right leg distal choreoathetosis	Rolling	Lying position		
	Heel/toe raising			