

**Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with (single) upper limb deficiency**

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	<input type="checkbox"/>
	Headache disorder or migraines?	<input type="checkbox"/>
	Learning disability / dyslexia?	<input type="checkbox"/>
	ADD / ADHD?	<input type="checkbox"/>
	Depression, anxiety or other psychiatric disorder?	<input type="checkbox"/>
<b>STEP 2 SYMPTOM EVALUATION</b>	Headache	<input type="checkbox"/>
	“Pressure in head”	<input type="checkbox"/>
	Neck pain	<input type="checkbox"/>
	Nausea or vomiting	<input type="checkbox"/>
	Dizziness	<input type="checkbox"/>
	Blurred vision	<input type="checkbox"/>
	Balance problems	<input type="checkbox"/>
	Sensitivity to light	<input type="checkbox"/>
	Sensitivity to noise	<input type="checkbox"/>
	Feeling slowed down	<input type="checkbox"/>
	Feeling like “in a fog”	<input type="checkbox"/>
	“Don’t feel right”	<input type="checkbox"/>
	Difficulty concentrating	<input type="checkbox"/>
	Difficulty remembering	<input type="checkbox"/>
	Fatigue or low energy	<input type="checkbox"/>
	Confusion	<input type="checkbox"/>
	Drowsiness	<input type="checkbox"/>
	More emotional	<input type="checkbox"/>
	Irritability	<input type="checkbox"/>
	Sadness	<input type="checkbox"/>
Nervous or anxious	<input type="checkbox"/>	
Trouble falling asleep	<input type="checkbox"/>	
Symptoms get worse with physical activity?	<input type="checkbox"/>	
Symptoms get worse with mental activity?	<input type="checkbox"/>	
If 100% is feeling perfectly normal, what percent of normal do you feel?	<input type="checkbox"/>	
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	<input type="checkbox"/>
	Today’s date	<input type="checkbox"/>
	Weekday	<input type="checkbox"/>
	Current year	<input type="checkbox"/>
	Current time (within 1 hour)	<input type="checkbox"/>
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	<input type="checkbox"/>
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	<input type="checkbox"/>
	Repeat a string of numbers in reverse order	<input type="checkbox"/>
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	<input type="checkbox"/>
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	<input type="checkbox"/>
	Full range of pain-free PASSIVE cervical spine movement	<input type="checkbox"/>
	(fixed head) Look side-to-side and up-and-down	<input type="checkbox"/>

	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

**Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with (bilateral) upper limb deficiency**

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b>	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	
	(fixed head) Look side-to-side and up-and-down	

	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

**Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with (single) lower limb deficiency**

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b>	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	
	(fixed head) Look side-to-side and up-and-down	

	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	Test in day prosthetic
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Test in day prosthetic
	Tandem stance (non-dominant foot at back)	Test in day prosthetic
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

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## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with (bilateral) lower limb deficiency

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b>	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	Consider looking for change
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
	Symptoms get worse with physical activity?	
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	
	(fixed head) Look side-to-side and up-and-down	

	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	Test in day prosthetic or no prosthetic
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Test in day prosthetic or no prosthetic
	Tandem stance (non-dominant foot at back)	Test in day prosthetic or no prosthetic
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes



## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with impaired vision

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	Green
	Headache disorder or migraines?	Green
	Learning disability / dyslexia?	Green
	ADD / ADHD?	Green
	Depression, anxiety or other psychiatric disorder?	Green
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider translator/screen reader
	Headache	Green
	"Pressure in head"	Green
	Neck pain	Green
	Nausea or vomiting	Green
	Dizziness	Green
	Blurred vision	Yellow
	Balance problems	Yellow
	Sensitivity to light	Yellow
	Sensitivity to noise	Green
	Feeling slowed down	Green
	Feeling like "in a fog"	Green
	"Don't feel right"	Green
	Difficulty concentrating	Green
	Difficulty remembering	Green
	Fatigue or low energy	Green
	Confusion	Green
	Drowsiness	Green
	More emotional	Green
	Irritability	Green
Sadness	Green	
Nervous or anxious	Green	
Trouble falling asleep	Green	
Symptoms get worse with physical activity?	Green	
Symptoms get worse with mental activity?	Green	
If 100% is feeling perfectly normal, what percent of normal do you feel?	Green	
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Green
	Today's date	Green
	Weekday	Green
	Current year	Green
	Current time (within 1 hour)	Green
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Green
	Repeat a string of numbers	Green
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Green
	Repeat a string of numbers in reverse order	Green
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Green
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Red
	Full range of pain-free PASSIVE cervical spine movement	Green
	(fixed head) Look side-to-side and up-and-down	Yellow

	Perform finger nose coordination test normally	Baseline may be an issue
	Perform tandem gait normally	Baseline may be lower
<b>BALANCE EXAMINATION</b>	Double leg stance	Baseline may be lower
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Baseline may be lower
	Tandem stance (non-dominant foot at back)	Baseline may be lower
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

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## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with absent vision

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	Green
	Headache disorder or migraines?	Green
	Learning disability / dyslexia?	Green
	ADD / ADHD?	Green
	Depression, anxiety or other psychiatric disorder?	Green
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider translator/screen reader
	Headache	Green
	“Pressure in head”	Green
	Neck pain	Green
	Nausea or vomiting	Green
	Dizziness	Green
	Blurred vision	Yellow
	Balance problems	Yellow
	Sensitivity to light	Yellow
	Sensitivity to noise	Green
	Feeling slowed down	Green
	Feeling like “in a fog”	Green
	“Don’t feel right”	Green
	Difficulty concentrating	Green
	Difficulty remembering	Green
	Fatigue or low energy	Green
	Confusion	Green
	Drowsiness	Green
	More emotional	Green
	Irritability	Green
Sadness	Green	
Nervous or anxious	Green	
Trouble falling asleep	Yellow	
Symptoms get worse with physical activity?	Green	
Symptoms get worse with mental activity?	Green	
If 100% is feeling perfectly normal, what percent of normal do you feel?	Green	
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Green
	Today’s date	Green
	Weekday	Green
	Current year	Green
	Current time (within 1 hour)	Green
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Green
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Green
	Repeat a string of numbers in reverse order	Green
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Green
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Red
	Full range of pain-free PASSIVE cervical spine movement	Green
	(fixed head) Look side-to-side and up-and-down	Red

	Perform finger nose coordination test normally	Baseline may be lower
	Perform tandem gait normally	Baseline may be lower
<b>BALANCE EXAMINATION</b>	Double leg stance	Baseline may be lower
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Baseline may be lower
	Tandem stance (non-dominant foot at back)	Baseline may be lower
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

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## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with globe absent

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	Green
	Headache disorder or migraines?	Green
	Learning disability / dyslexia?	Green
	ADD / ADHD?	Green
	Depression, anxiety or other psychiatric disorder?	Green
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider translator/screen reader
	Headache	Green
	“Pressure in head”	Green
	Neck pain	Green
	Nausea or vomiting	Green
	Dizziness	Green
	Blurred vision	Yellow
	Balance problems	Yellow
	Sensitivity to light	Yellow
	Sensitivity to noise	Green
	Feeling slowed down	Green
	Feeling like “in a fog”	Green
	“Don’t feel right”	Green
	Difficulty concentrating	Green
	Difficulty remembering	Green
	Fatigue or low energy	Green
	Confusion	Green
	Drowsiness	Green
	More emotional	Green
	Irritability	Green
Sadness	Green	
Nervous or anxious	Green	
Trouble falling asleep	Consider if unilateral or bilateral	
Symptoms get worse with physical activity?	Green	
Symptoms get worse with mental activity?	Green	
If 100% is feeling perfectly normal, what percent of normal do you feel?	Green	
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Green
	Today’s date	Green
	Weekday	Green
	Current year	Green
	Current time (within 1 hour)	Green
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Green
	Repeat a string of numbers	Green
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers in reverse order	Green
	Tell the months of the year in reverse order	Green
<b>MONTHS IN REVERSE ORDER</b>		
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Orange
	Full range of pain-free PASSIVE cervical spine movement	Green
	(fixed head) Look side-to-side and up-and-down	Orange

	Perform finger nose coordination test normally	Baseline may be lower
	Perform tandem gait normally	Baseline may be lower
<b>BALANCE EXAMINATION</b>	Double leg stance	Baseline may be lower
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Baseline may be lower
	Tandem stance (non-dominant foot at back)	Baseline may be lower
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in SCI athletes with quadriplegia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	Consider initial injury
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	"Pressure in head"	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	Consider reporting sitting balance
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like "in a fog"	
	"Don't feel right"	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
	Symptoms get worse with physical activity?	
	Symptoms get worse with mental activity?	
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today's date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement (fixed head) Look side-to-side and up-and-down	Comparative to baseline

	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

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## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in SCI athletes with paraplegia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	Consider initial injury
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	Consider reporting sitting balance
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	
	(fixed head) Look side-to-side and up-and-down	

	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

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## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with spastic diplegia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	Leg function may be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with spastic hemiplegia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function not affected if use unaffected arm
	Perform tandem gait normally	Leg function will be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with spastic quadriplegia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	Leg function will be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes



## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with dyskinetic cerebral palsy

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Can tester interpret/LD association
	Today’s date	Can tester interpret/LD association
	Weekday	Can tester interpret/LD association
	Current year	Can tester interpret/LD association
	Current time (within 1 hour)	Can tester interpret/LD association
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	Leg function will be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with ataxic cerebral palsy

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Can tester interpret/LD association
	Today’s date	Can tester interpret/LD association
	Weekday	Can tester interpret/LD association
	Current year	Can tester interpret/LD association
	Current time (within 1 hour)	Can tester interpret/LD association
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	Leg function will be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in Cerebral Palsy athletes with mixed cerebral palsy

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	Increased risk
	ADD / ADHD?	Increased risk
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	Consider baseline
	Nausea or vomiting	
	Dizziness	
	Blurred vision	Increased risk
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Reflect on values over time
	Difficulty remembering	Reflect on values over time
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	Can tester interpret/LD association
	Today’s date	Can tester interpret/LD association
	Weekday	Can tester interpret/LD association
	Current year	Can tester interpret/LD association
	Current time (within 1 hour)	Can tester interpret/LD association
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	Can tester interpret/LD association
	Repeat a string of numbers in reverse order	Can tester interpret/LD association
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	Can tester interpret/LD association
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Increased risk
	Full range of pain-free PASSIVE cervical spine movement	Comparative to baseline

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	Hand function may be affected
	Perform tandem gait normally	Leg function will be affected
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Consider association with learning disability

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with intellectual impairment

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	Consider if accompanying person required/modify descriptive words
	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
	Symptoms get worse with physical activity?	
	Symptoms get worse with mental activity?	
	If 100% is feeling perfectly normal, what percent of normal do you feel?	
	<b>STEP 3 COGNITIVE SCREENING</b>	
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Can tester interpret/LD association
	Repeat a string of numbers	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers in reverse order	
	Tell the months of the year in reverse order	
<b>MONTHS IN REVERSE ORDER</b>		
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	

	(fixed head) Look side-to-side and up-and-down	Green
	Perform finger nose coordination test normally	Green
	Perform tandem gait normally	Green
<b>BALANCE EXAMINATION</b>	Double leg stance	Green
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Green
	Tandem stance (non-dominant foot at back)	Green
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Yellow

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes



## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with achondroplasia

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	“Pressure in head”	
	Neck pain	Increased incidence of atlantoaxial instability
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
	Symptoms get worse with physical activity?	
	Symptoms get worse with mental activity?	
	If 100% is feeling perfectly normal, what percent of normal do you feel?	
	<b>STEP 3 COGNITIVE SCREENING</b>	
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	Increased incidence of atlantoaxial instability

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	
	Perform tandem gait normally	
<b>BALANCE EXAMINATION</b>	Double leg stance	
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	
	Tandem stance (non-dominant foot at back)	
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with arthrogyrosis

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	Weakness/balance may be difficult to assess given reduced joint ROM
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
	Repeat a string of numbers	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	May be altered due to reduced joint ROM

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	May be altered due to reduced joint ROM
	Perform tandem gait normally	May be altered due to reduced joint ROM
<b>BALANCE EXAMINATION</b>	Double leg stance	Gait affected in those with LE manifestations
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Gait affected in those with LE manifestations
	Tandem stance (non-dominant foot at back)	Gait affected in those with LE manifestations
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with polio

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	“Pressure in head”	
	Neck pain	Dependent on which muscles affected
	Nausea or vomiting	
	Dizziness	
	Blurred vision	
	Balance problems	Dependent on which muscles affected
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	Consider presence in post polio syndrome
	Feeling like “in a fog”	Consider presence in post polio syndrome
	“Don’t feel right”	Consider presence in post polio syndrome
	Difficulty concentrating	Consider presence in post polio syndrome
	Difficulty remembering	Consider presence in post polio syndrome
	Fatigue or low energy	Consider presence in post polio syndrome
	Confusion	
	Drowsiness	Consider presence in post polio syndrome
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?	Consider presence in post polio syndrome	
Symptoms get worse with mental activity?	Consider presence in post polio syndrome	
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement (fixed head) Look side-to-side and up-and-down	Dependent on which muscles affected

	Perform finger nose coordination test normally	Likely to have baseline weakness (less likely tingling/burning)
	Perform tandem gait normally	Likely to have baseline weakness (less likely tingling/burning)
<b>BALANCE EXAMINATION</b>	Double leg stance	Dependent on which muscles affected
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Dependent on which muscles affected
	Tandem stance (non-dominant foot at back)	Dependent on which muscles affected
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with muscular dystrophy

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	
	“Pressure in head”	
	Neck pain	
	Nausea or vomiting	
	Dizziness	Vision can be affected in OPMD
	Blurred vision	Vision can be affected in OPMD
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	Increased risk common
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?	Early fatigue is common in people with MD	
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
	Repeat a string of numbers	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers in reverse order	
	Tell the months of the year in reverse order	
<b>MONTHS IN REVERSE ORDER</b>		
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	May be altered due to muscle weakness
	(fixed head) Look side-to-side and up-and-down	Vision can be affected in OPMD

	Perform finger nose coordination test normally	May be altered due to muscle weakness
	Perform tandem gait normally	May be altered due to muscle weakness
<b>BALANCE EXAMINATION</b> Modified Balance Error Scoring System (mBESS) testing	Double leg stance	May be altered due to muscle weakness
	Single leg stance (non-dominant foot)	May be altered due to muscle weakness
	Tandem stance (non-dominant foot at back)	May be altered due to muscle weakness
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes



## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with multiple sclerosis

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	Headaches can be seen in MS especially if high burden brain lesions
	“Pressure in head”	Headaches can be seen in MS especially if high burden brain lesions
	Neck pain	
	Nausea or vomiting	
	Dizziness	Vision can be affected in MS
	Blurred vision	Vision can be affected in MS
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	
	Difficulty remembering	
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
	Nervous or anxious	
	Trouble falling asleep	
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers	
	Repeat a string of numbers in reverse order	
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	
	Full range of pain-free PASSIVE cervical spine movement	May be altered due to muscle weakness

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	May be altered due to muscle weakness
	Perform tandem gait normally	May be altered due to muscle weakness
<b>BALANCE EXAMINATION</b>	Double leg stance	Peripheral strength affected in MS
Modified Balance Error Scoring System (mBESS) testing	Single leg stance (non-dominant foot)	Peripheral strength affected in MS
	Tandem stance (non-dominant foot at back)	Peripheral strength affected in MS
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes

## Considerations and usability of the 5th edition of the Sport Concussion Assessment Tool (SCAT5) for the office or off-field assessment in athletes with spina bifida

<b>STEP 1 ATHLETE BACKGROUND</b>	Hospitalization for a head injury?	
	Headache disorder or migraines?	
	Learning disability / dyslexia?	
	ADD / ADHD?	
	Depression, anxiety or other psychiatric disorder?	
<b>STEP 2 SYMPTOM EVALUATION</b> The athlete should be given the symptom form and asked to read this instruction paragraph out loud, and then complete the symptom scale	Symptom form with instructions	
	Headache	Headaches can be seen in SB especially if chronic hydrocephalus
	“Pressure in head”	Headaches can be seen in SB especially if chronic hydrocephalus
	Neck pain	Also a symptom of hydrocephalus
	Nausea or vomiting	Also a symptom of hydrocephalus
	Dizziness	
	Blurred vision	
	Balance problems	
	Sensitivity to light	
	Sensitivity to noise	
	Feeling slowed down	
	Feeling like “in a fog”	
	“Don’t feel right”	
	Difficulty concentrating	Also a symptom of hydrocephalus
	Difficulty remembering	Also a symptom of hydrocephalus
	Fatigue or low energy	
	Confusion	
	Drowsiness	
	More emotional	
	Irritability	
	Sadness	
Nervous or anxious		
Trouble falling asleep		
Symptoms get worse with physical activity?		
Symptoms get worse with mental activity?		
If 100% is feeling perfectly normal, what percent of normal do you feel?		
<b>STEP 3 COGNITIVE SCREENING</b>		
<b>ORIENTATION</b>	Month	
	Today’s date	
	Weekday	
	Current year	
	Current time (within 1 hour)	
<b>IMMEDIATE MEMORY</b>	Repeat as many words as possible from a read list	Mild intellectual impairment often present in SB
	Repeat a string of numbers	Mild intellectual impairment often present in SB
<b>CONCENTRATION – Digits backwards</b>	Repeat a string of numbers in reverse order	Mild intellectual impairment often present in SB
<b>MONTHS IN REVERSE ORDER</b>	Tell the months of the year in reverse order	
<b>STEP 4 NEUROLOGICAL SCREEN</b>	Read out loud and follow instructions without difficulty	Mild intellectual impairment often present in SB
	Full range of pain-free PASSIVE cervical spine movement	

	(fixed head) Look side-to-side and up-and-down	
	Perform finger nose coordination test normally	
	Perform tandem gait normally	LE strength affected in SB; UE motor testing likely normal
<b>BALANCE EXAMINATION</b> Modified Balance Error Scoring System (mBESS) testing	Double leg stance	LE strength affected in SB; UE motor testing likely normal
	Single leg stance (non-dominant foot)	LE strength affected in SB; UE motor testing likely normal
	Tandem stance (non-dominant foot at back)	LE strength affected in SB; UE motor testing likely normal
<b>STEP 5 DELAYED RECALL</b>	Repeat as many words as possible from the previously read list (step 3)	Mild intellectual impairment often present in SB

Green shading: no anticipated additional considerations for Para athletes; Yellow shading: potential additional considerations for some Para athletes (dependent on the level or nature of athlete impairment); Red shading: items from the SCAT5 that should not be used for Para athletes