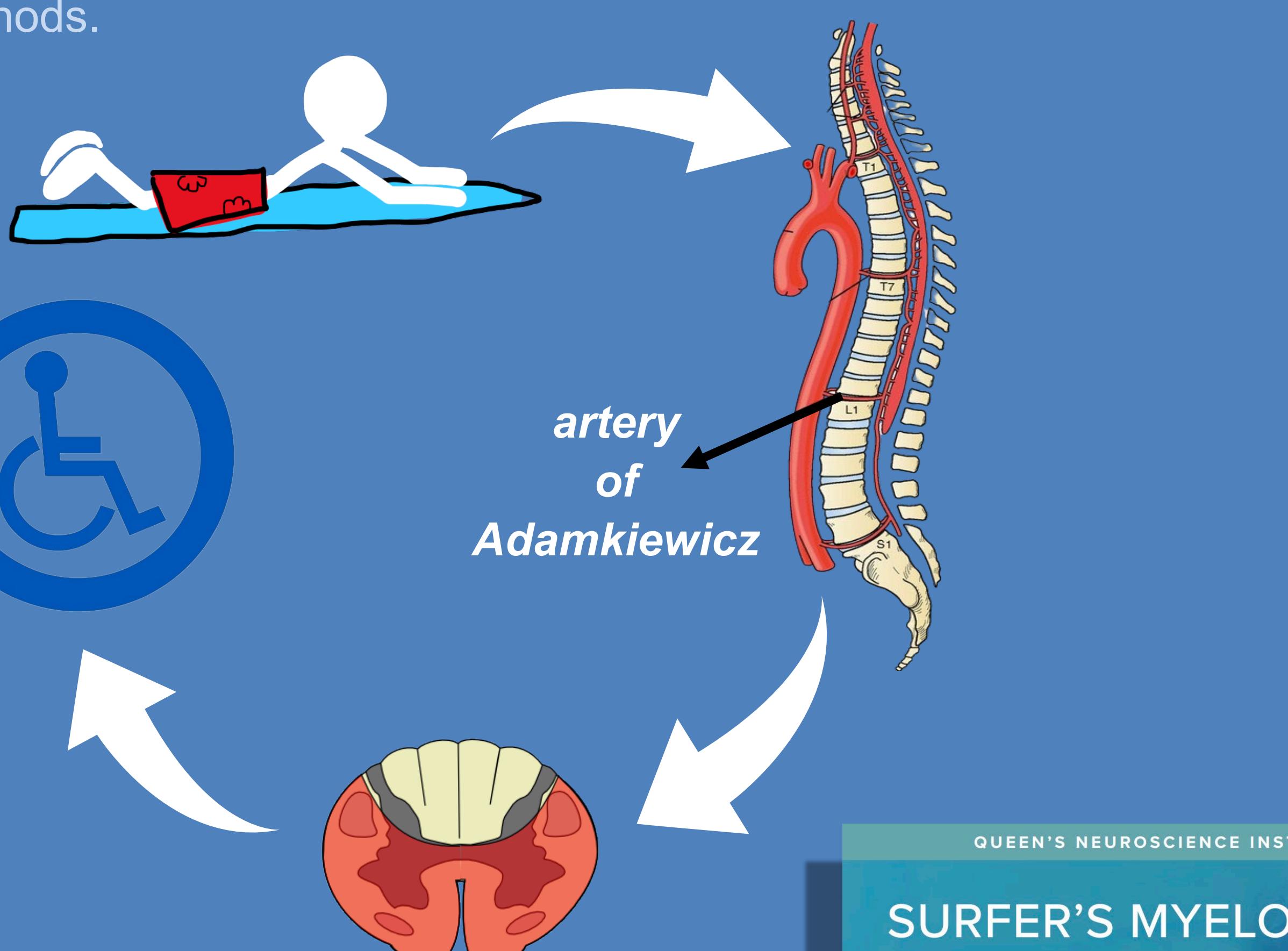


Outcomes in Surfer's Myelopathy: The First Prospective Cohort Study

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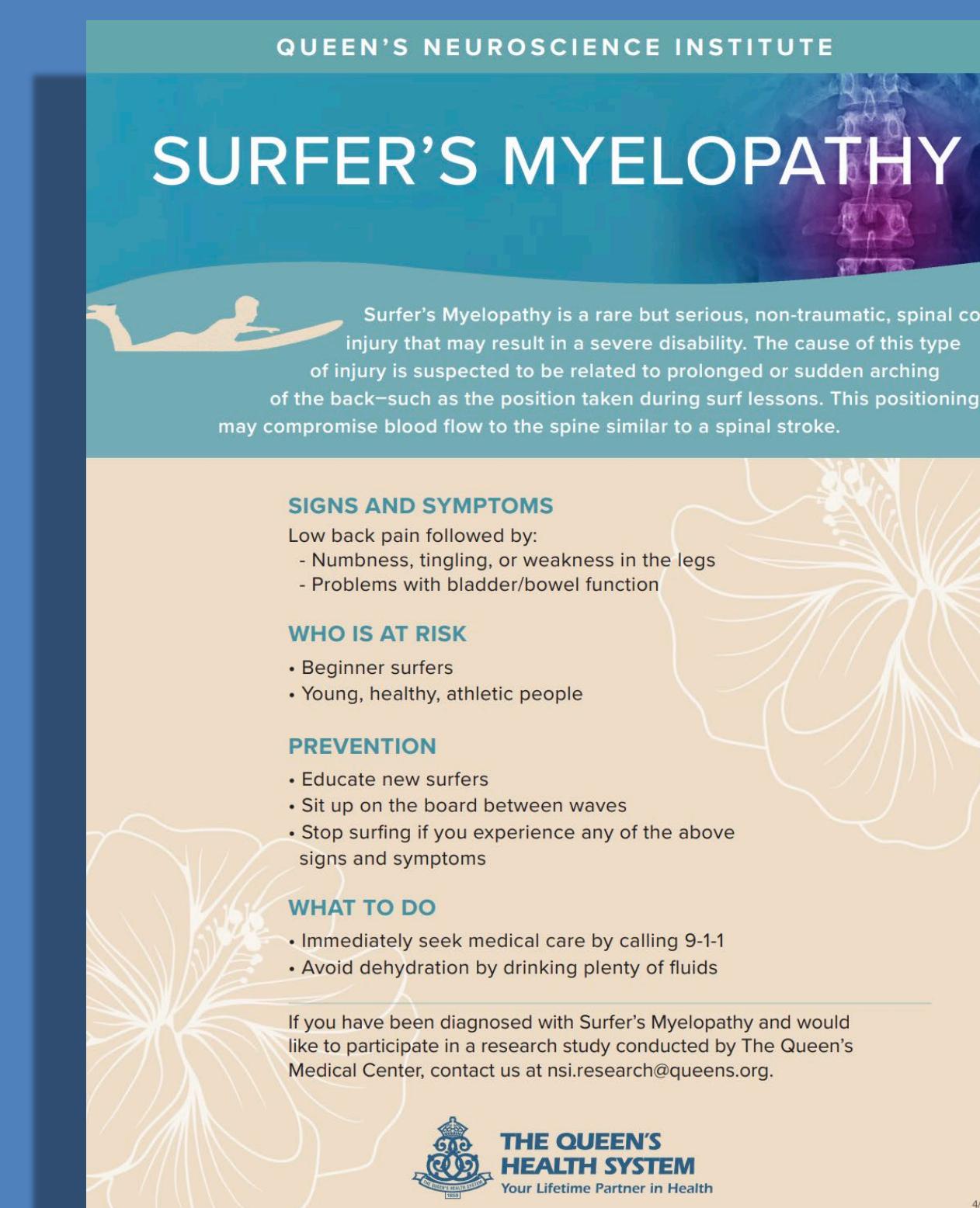
Background

Surfer's myelopathy (SM) is a non-traumatic spinal cord injury (SCI) characterized by the complete or partial loss of sensory-motor function in the lower half of the body¹. The prevalence of this disease in first-time surfers gave rise to its name¹. This condition is notably unique due to the variability of the injury and the wide range of recovery outcomes observed over time². Currently, the literature on SM is limited to single case reports and case series, which do not consistently track the patient's recovery process long-term. The exact etiology of SM has yet to be determined, but symptoms consistent with those of **anterior spinal cord syndrome** suggest that it is caused by an **ischemic issue** presented by **lying in the prone position** for extended periods of time²⁻⁴. Prospective studies are needed to enable consistent and systematic follow-ups, which would provide more insight into the progression of the disease and the effectiveness of current treatment methods.



Future Directions

- Better organization to avoid missed follow-ups
- Scores do not cover the full extent of impairment
- AIS examination is not standard among all healthcare professionals
- Participant retention
- Prioritize outreach & education to spread awareness and prevent SM

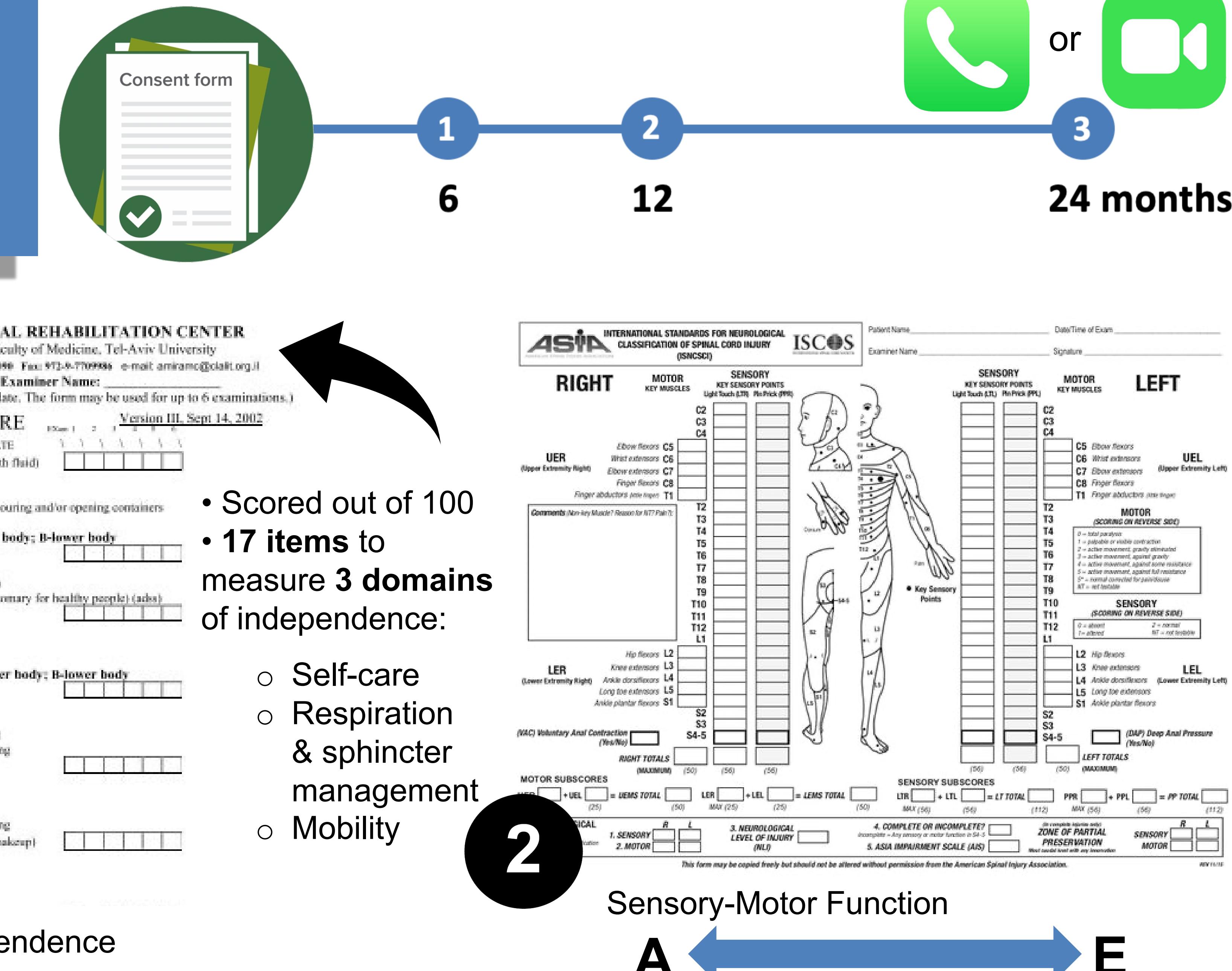


Methods

Inclusion Criteria

- Treated or referred to QMC* between July 2021 and July 2026
- Non-traumatic myelopathy associated with surfing
- Clinical history of direct SCI or SCI not associated with surfing

Follow-up at 3 timepoints post-injury



*Patients were also recruited from hospitals outside QUMG's jurisdiction using flyers made available to other healthcare providers in the surrounding area.

Recorded two scores at each follow-up

- Spinal Cord Independence Measure (SCIM) Version III**
- ASIA Impairment Score (AIS)**

1

LOEWENSTEIN HOSPITAL REHABILITATION CENTER
Affiliated with the Sackler Faculty of Medicine, Tel-Aviv University
Patient Name: **ID:** **Examiner Name:**
(Enter the score for each function in the adjacent square below the date. The form may be used for up to 6 examinations.)
SCIM-SPINAL CORD INDEPENDENCE MEASURE
Version III, Sept 14, 2002

Self-Care	DATE
1. Feeding (eating, opening containers, pouring, bringing food to mouth, holding cup with fluid)	1 2 3 4 5 6
2. Wakes independently; needs adaptive devices or assistance only for cutting food and/or pouring and/or opening containers	1 2 3 4 5 6
3. Washes independently; does not require assistance or adaptive devices	1 2 3 4 5 6
4. Bathing: (washing, drying body and head, manipulating water tap)	1 2 3 4 5 6
5. Grooming: (washing hands, teeth, hair, face, dressing, undressing)	1 2 3 4 5 6
6. Requires total assistance	1 2 3 4 5 6
7. Requires partial assistance	1 2 3 4 5 6
8. Washes independently with adaptive devices or in a specific setting (e.g., bath, chair)	1 2 3 4 5 6
9. Washes independently; does not require adaptive devices or specific setting (not customary for healthy people) (adls)	1 2 3 4 5 6
10. Requires total assistance	1 2 3 4 5 6
11. Requires partial assistance	1 2 3 4 5 6
12. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
13. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
14. Requires total assistance	1 2 3 4 5 6
15. Requires partial assistance	1 2 3 4 5 6
16. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
17. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
18. Requires total assistance	1 2 3 4 5 6
19. Requires partial assistance	1 2 3 4 5 6
20. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
21. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
22. Requires total assistance	1 2 3 4 5 6
23. Requires partial assistance	1 2 3 4 5 6
24. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
25. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
26. Requires total assistance	1 2 3 4 5 6
27. Requires partial assistance	1 2 3 4 5 6
28. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
29. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
30. Requires total assistance	1 2 3 4 5 6
31. Requires partial assistance	1 2 3 4 5 6
32. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
33. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
34. Requires total assistance	1 2 3 4 5 6
35. Requires partial assistance	1 2 3 4 5 6
36. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
37. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
38. Requires total assistance	1 2 3 4 5 6
39. Requires partial assistance	1 2 3 4 5 6
40. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
41. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
42. Requires total assistance	1 2 3 4 5 6
43. Requires partial assistance	1 2 3 4 5 6
44. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
45. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
46. Requires total assistance	1 2 3 4 5 6
47. Requires partial assistance	1 2 3 4 5 6
48. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
49. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
50. Requires total assistance	1 2 3 4 5 6
51. Requires partial assistance	1 2 3 4 5 6
52. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
53. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
54. Requires total assistance	1 2 3 4 5 6
55. Requires partial assistance	1 2 3 4 5 6
56. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
57. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
58. Requires total assistance	1 2 3 4 5 6
59. Requires partial assistance	1 2 3 4 5 6
60. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
61. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
62. Requires total assistance	1 2 3 4 5 6
63. Requires partial assistance	1 2 3 4 5 6
64. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
65. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
66. Requires total assistance	1 2 3 4 5 6
67. Requires partial assistance	1 2 3 4 5 6
68. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
69. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
70. Requires total assistance	1 2 3 4 5 6
71. Requires partial assistance	1 2 3 4 5 6
72. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
73. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
74. Requires total assistance	1 2 3 4 5 6
75. Requires partial assistance	1 2 3 4 5 6
76. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
77. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
78. Requires total assistance	1 2 3 4 5 6
79. Requires partial assistance	1 2 3 4 5 6
80. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
81. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
82. Requires total assistance	1 2 3 4 5 6
83. Requires partial assistance	1 2 3 4 5 6
84. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
85. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
86. Requires total assistance	1 2 3 4 5 6
87. Requires partial assistance	1 2 3 4 5 6
88. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
89. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
90. Requires total assistance	1 2 3 4 5 6
91. Requires partial assistance	1 2 3 4 5 6
92. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
93. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
94. Requires total assistance	1 2 3 4 5 6
95. Requires partial assistance	1 2 3 4 5 6
96. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
97. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
98. Requires total assistance	1 2 3 4 5 6
99. Requires partial assistance	1 2 3 4 5 6
100. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
101. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
102. Requires total assistance	1 2 3 4 5 6
103. Requires partial assistance	1 2 3 4 5 6
104. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
105. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
106. Requires total assistance	1 2 3 4 5 6
107. Requires partial assistance	1 2 3 4 5 6
108. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
109. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
110. Requires total assistance	1 2 3 4 5 6
111. Requires partial assistance	1 2 3 4 5 6
112. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
113. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
114. Requires total assistance	1 2 3 4 5 6
115. Requires partial assistance	1 2 3 4 5 6
116. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
117. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
118. Requires total assistance	1 2 3 4 5 6
119. Requires partial assistance	1 2 3 4 5 6
120. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
121. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
122. Requires total assistance	1 2 3 4 5 6
123. Requires partial assistance	1 2 3 4 5 6
124. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
125. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
126. Requires total assistance	1 2 3 4 5 6
127. Requires partial assistance	1 2 3 4 5 6
128. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
129. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
130. Requires total assistance	1 2 3 4 5 6
131. Requires partial assistance	1 2 3 4 5 6
132. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
133. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
134. Requires total assistance	1 2 3 4 5 6
135. Requires partial assistance	1 2 3 4 5 6
136. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
137. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
138. Requires total assistance	1 2 3 4 5 6
139. Requires partial assistance	1 2 3 4 5 6
140. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
141. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
142. Requires total assistance	1 2 3 4 5 6
143. Requires partial assistance	1 2 3 4 5 6
144. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
145. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
146. Requires total assistance	1 2 3 4 5 6
147. Requires partial assistance	1 2 3 4 5 6
148. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
149. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
150. Requires total assistance	1 2 3 4 5 6
151. Requires partial assistance	1 2 3 4 5 6
152. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
153. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
154. Requires total assistance	1 2 3 4 5 6
155. Requires partial assistance	1 2 3 4 5 6
156. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
157. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
158. Requires total assistance	1 2 3 4 5 6
159. Requires partial assistance	1 2 3 4 5 6
160. Washes independently with adaptive devices or in a specific setting (adls)	1 2 3 4 5 6
161. Washes independently; does not require adaptive devices or specific setting (adls)	1 2 3 4 5 6
162. Requires total assistance	1 2 3 4 5 6
163. Requires partial assistance	1 2 3 4