Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
1	SITE	Numeric	8	Masked Site identifier
2	CaseID	Character	7	Masked Case Identifier
3	ControlType	Character	4	case/control type
4	StudySubjectID	Character	7	StudySubjectID
5	CSFractures	Character	100	Were there fractures of the cervical spine?
6	CFracturesOC	Numeric	8	Occipital condyle fracture
7	CFracturesC1	Numeric	8	C1 Fracture
8	C1SbFractureAR	Numeric	8	C1 Fracture Arches
9	C1SbFractureType	Character	100	C1 Fracture ArchesType
10	C1SbFractureTP	Numeric	8	C1 Fracture Transverse Process
11	C1SbFractureLM	Numeric	8	C1 Fracture Lateral Mass
12	C1SbFractureOI	Numeric	8	C1 Fracture Other injury fracture
13	C1SbFractureOItxt	Character	100	C1 Fracture Othe injury fracture description
14	CFracturesC2	Numeric	8	C2 Fracture
15	C2SbFractureOdontoid	Numeric	8	C2 Fracture Odontoid
16	C2SbFractureOdType	Character	100	C2 Fracture Odontoid Type
17	C2SbFracturePars	Numeric	8	C2 Fracture Pars inerarticularis
18	C2SbFractureTypePARS	Character	100	C2 Fracture Pars inerarticularis type
19	C2SbFractureBOOT	Numeric	8	C2 fracture, body other than odonotoid
20	C2SbFractureBOOTypeWC	Numeric	8	C2 fracture, body other than odonotoidWedge/compression
21	C2SbFractureBOOTypeBT	Numeric	8	C2 fracture, body other than odonotoidBurst
22	C2SbFractureBOOTypeTD	Numeric	8	C2 fracture, body other than odonotoidTeardrop
23	C2SbFractureBOOTypeLH	Numeric	8	C2 fracture, body other than odonotoidLoss of height
24	C2SbFractureBOOTypeOR	Numeric	8	C2 fracture, body other than odonotoidOther
25	C2SbFractureBOOTypeORtxt	Character	100	C2 fracture, body other than odonotoidOther description
26	C2SbFractureLA	Numeric	8	C2 lamina fracture
27	C2SbFractureLM	Numeric	8	C2 lateral mass fracture
28	C2SbFractureSP	Numeric	8	C2 spinous process fracture
29	C2SbFractureOR	Numeric	8	C2 other injury fracture
30	C2SbFractureORtxt	Character	100	C2 other injury fracture description
31	CFracturesC3	Numeric	8	C3 fracture
32	C3SbFractureBY	Numeric	8	C3 body fracture
33	C3SbFractureBYWC	Numeric	8	C3 body fracturewedge/compression
34	C3SbFractureBYB	Numeric	8	C3 body fractureBurst
35	C3SbFractureBYTD	Numeric	8	C3 body fractureTeardrop
36	C3SbFractureBYLH	Numeric	8	C3 body fractureLoss of height

Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
37	C3SbFractureBYOR	Numeric	8	C3 body fractureOther
38	C3SbFractureBYORtxt	Character	100	C3 body fractureOther description
39	C3SbFracturePE	Numeric	8	C3 pedicle fracture
40	C3SbFracturePEType	Character	100	C3 pedicle fracture type
41	C3SbFractureTP	Numeric	8	C3 transverse process fracture
42	C3SbFractureLM	Numeric	8	C3 lateral mass fracture
43	C3SbFractureFT	Numeric	8	C3 facet fracture
44	C3SbFractureFTType	Character	100	C3 facet fracture type
45	C3SbFractureLA	Numeric	8	C3 lamina fracture
46	C3SbFractureSP	Numeric	8	C3 spinous process fracture
47	C3SbFractureCC	Numeric	8	C3 canal compromise fracture
48	C3SbFractureOR	Numeric	8	C3 other injury fracture
49	C3SbFractureORtxt	Character	100	C3 other injury fracture description
50	CFracturesC4	Numeric	8	C4 fracture
51	C4SbFractureBY	Numeric	8	C4 body fracture
52	C4SbFractureBYWC	Numeric	8	C4 body fracturewedge/compression
53	C4SbFractureBYB	Numeric	8	C4 body fractureBurst
54	C4SbFractureBYTD	Numeric	8	C4 body fractureTeardrop
55	C4SbFractureBYLH	Numeric	8	C4 body fractureLoss of height
56	C4SbFractureBYOR	Numeric	8	C4 body fractureOther
57	C4SbFractureBYORtxt	Character	100	C4 body fractureOther description
58	C4SbFracturePE	Numeric	8	C4 pedicle fracture
59	C4SbFracturePEType	Character	100	C4 pedicle fracture type
60	C4SbFractureTP	Numeric	8	C4 transverse process fracture
61	C4SbFractureLM	Numeric	8	C4 lateral mass fracture
62	C4SbFractureFT	Numeric	8	C4 facet fracture
63	C4SbFractureFTType	Character	100	C4 facet fracture type
64	C4SbFractureLA	Numeric	8	C4 lamina fracture
65	C4SbFractureSP	Numeric	8	C4 spinous process fracture
66	C4SbFractureCC	Numeric	8	C4 canal compromise fracture
67	C4SbFractureOR	Numeric	8	C4 other injury fracture
68	C4SbFractureORtxt	Character	100	C4 other injury fracture description
69	CFracturesC5	Numeric	8	C5 fracture
70	C5SbFractureBY	Numeric	8	C5 body fracture
71	C5SbFractureBYWC	Numeric	8	C5 body fracturewedge/compression
72	C5SbFractureBYB	Numeric	8	C5 body fractureBurst

Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
73	C5SbFractureBYTD	Numeric	8	C5 body fractureTeardrop
74	C5SbFractureBYLH	Numeric	8	C5 body fractureLoss of height
75	C5SbFractureBYOR	Numeric	8	C5 body fractureOther
76	C5SbFractureBYORtxt	Character	100	C5 body fractureOther description
77	C5SbFracturePE	Numeric	8	C5 pedicle fracture
78	C5SbFracturePEType	Character	100	C5 pedicle fracture type
79	C5SbFractureTP	Numeric	8	C5 transverse process fracture
80	C5SbFractureLM	Numeric	8	C5 lateral mass fracture
81	C5SbFractureFT	Numeric	8	C5 facet fracture
82	C5SbFractureFTType	Character	100	C5 facet fracture type
83	C5SbFractureLA	Numeric	8	C5 lamina fracture
84	C5SbFractureSP	Numeric	8	C5 spinous process fracture
85	C5SbFractureCC	Numeric	8	C5 canal compromise fracture
86	C5SbFractureOR	Numeric	8	C5 other injury fracture
87	C5SbFractureORtxt	Character	100	C5 other injury fracture description
88	CFracturesC6	Numeric	8	C6 fracture
89	C6SbFractureBY	Numeric	8	C6 body fracture
90	C6SbFractureBYWC	Numeric	8	C6 body fracturewedge/compression
91	C6SbFractureBYB	Numeric	8	C6 body fractureBurst
92	C6SbFractureBYTD	Numeric	8	C6 body fractureTeardrop
93	C6SbFractureBYLH	Numeric	8	C6 body fractureLoss of height
94	C6SbFractureBYOR	Numeric	8	C6 body fractureOther
95	C6SbFractureBYORtxt	Character	100	C6 body fractureOther description
96	C6SbFracturePE	Numeric	8	C6 pedicle fracture
97	C6SbFracturePEType	Character	100	C6 pedicle fracture type
98	C6SbFractureTP	Numeric	8	C6 transverse process fracture
99	C6SbFractureLM	Numeric	8	C6 lateral mass fracture
100	C6SbFractureFT	Numeric	8	C6 facet fracture
101	C6SbFractureFTType	Character	100	C6 facet fracture type
102	C6SbFractureLA	Numeric	8	C6 lamina fracture
103	C6SbFractureSP	Numeric	8	C6 spinous process fracture
104	C6SbFractureCC	Numeric	8	C6 canal compromise fracture
105	C6SbFractureOR	Numeric	8	C6 other injury fracture
106	C6SbFractureORtxt	Character	100	C6 other injury fracture description
107	CFracturesC7	Numeric	8	C7 fracture
108	C7SbFractureBY	Numeric	8	C7 body fracture

Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
109	C7SbFractureBYWC	Numeric	8	C7 body fracturewedge/compression
110	C7SbFractureBYB	Numeric	8	C7 body fractureBurst
111	C7SbFractureBYTD	Numeric	8	C7 body fractureTeardrop
112	C7SbFractureBYLH	Numeric	8	C7 body fractureLoss of height
113	C7SbFractureBYOR	Numeric	8	C7 body fractureOther
114	C7SbFractureBYORtxt	Character	100	C7 body fractureOther description
115	C7SbFracturePE	Numeric	8	C7 pedicle fracture
116	C7SbFracturePEType	Character	100	C7 pedicle fracture type
117	C7SbFractureTP	Numeric	8	C7 transverse process fracture
118	C7SbFractureLM	Numeric	8	C7 lateral mass fracture
119	C7SbFractureFT	Numeric	8	C7 facet fracture
120	C7SbFractureFTType	Character	100	C7 facet fracture type
121	C7SbFractureLA	Numeric	8	C7 lamina fracture
122	C7SbFractureSP	Numeric	8	C7 spinous process fracture
123	C7SbFractureCC	Numeric	8	C7 canal compromise fracture
124	C7SbFractureOR	Numeric	8	C7 other injury fracture
125	C7SbFractureORtxt	Character	100	C7 other injury fracture description
126	Ligamentoptions	Character	100	Were there ligamentous injuries to the cervical spinal column?
127	LigamentousInjuryOAD	Numeric	8	If yes, occipital-atlantal dislocation
128	LigamentousInjuryC12	Numeric	8	If yes, C1-2 ligamentous injury
129	C1_2SbLigFD	Numeric	8	C1-2 facet dislocations (jumped)/perched facets
130	C1_2SbLigFDUB	Character	100	C1-2 facet dislocations (jumped)/perched facets type
131	C1_2SbLigSL	Numeric	8	C1-2 subluxation of one vertebral body on another
132	C1_2SbLigSLARS	Numeric	8	C1-2 atlantoaxial rotary subluxation
133	C1_2SbLigSLADI	Numeric	8	C1-2 ADI interval > 5mm
134	C1_2SbLigAL	Numeric	8	C1-2 angulation
135	C1_2SbLigSC	Numeric	8	C1-2 signal change on MRI
136	C1_2SbLigSCAL	Numeric	8	C1-2 signal change on MRIanterior ligaments/elements
137	C1_2SbLigSCDC	Numeric	8	C1-2 signal change on MRIdisc
138	C1_2SbLigSCWSC	Numeric	8	C1-2 signal change on MRIwithin spinal canal, including hematoma
139	C1_2SbLigSCPL	Numeric	8	C1-2 signal change on MRIposterior ligaments/elements
140	LigamentousInjuryC23	Numeric	8	If yes, C2-3 ligamentous injury
141	C2_3SbLigFD	Numeric	8	C2-3 facet dislocations (jumped)/perched facets
142	C2_3SbLigFDUB	Character	100	C2-3 facet dislocations (jumped)/perched facets type
143	C2_3SbLigSL	Numeric	8	C2-3 subluxation of one vertebral body on another
144	C2_3SbLigAL	Numeric	8	C2-3 angulation

Variable		Variable	Variable	
Number	Variable Name	Туре	Length	Variable Label
145	C2_3SbLigSC	Numeric	8	C2-3 signal change on MRI
146	C2_3SbLigSCAL	Numeric	8	C2-3 signal change on MRIanterior ligaments/elements
147	C2_3SbLigSCDC	Numeric	8	C2-3 signal change on MRIdisc
148	C2_3SbLigSCWSC	Numeric	8	C2-3 signal change on MRIwithin spinal canal, including hematoma
149	C2_3SbLigSCPL	Numeric	8	C2-3 signal change on MRIposterior ligaments/elements
150	LigamentousInjuryC34	Numeric	8	If yes, C3-4 ligamentous injury
151	C3_4SbLigFD	Numeric	8	C3-4 facet dislocations (jumped)/perched facets
152	C3_4SbLigFDUB	Character	100	C3-4 facet dislocations (jumped)/perched facets type
153	C3_4SbLigSL	Numeric	8	C3-4 subluxation of one vertebral body on another
154	C3_4SbLigAL	Numeric	8	C3-4 angulation
155	C3_4SbLigSC	Numeric	8	C3-4 signal change on MRI
156	C3_4SbLigSCAL	Numeric	8	C3-4 signal change on MRIanterior ligaments/elements
157	C3_4SbLigSCDC	Numeric	8	C3-4 signal change on MRIdisc
158	C3_4SbLigSCWSC	Numeric	8	C3-4 signal change on MRIwithin spinal canal, including hematoma
159	C3_4SbLigSCPL	Numeric	8	C3-4 signal change on MRIposterior ligaments/elements
160	LigamentousInjuryC45	Numeric	8	If yes, C4-5 ligamentous injury
161	C4_5SbLigFD	Numeric	8	C4-5 facet dislocations (jumped)/perched facets
162	C4_5SbLigFDUB	Character	100	C4-5 facet dislocations (jumped)/perched facets type
163	C4_5SbLigSL	Numeric	8	C4-5 subluxation of one vertebral body on another
164	C4_5SbLigAL	Numeric	8	C4-5 angulation
165	C4_5SbLigSC	Numeric	8	C4-5 signal change on MRI
166	C4_5SbLigSCAL	Numeric	8	C4-5 signal change on MRIanterior ligaments/elements
167	C4_5SbLigSCDC	Numeric	8	C4-5 signal change on MRIdisc
168	C4_5SbLigSCWSC	Numeric	8	C4-5 signal change on MRIwithin spinal canal, including hematoma
169	C4_5SbLigSCPL	Numeric	8	C4-5 signal change on MRIposterior ligaments/elements
170	LigamentousInjuryC56	Numeric	8	If yes, C5-6 ligamentous injury
171	C5_6SbLigFD	Numeric	8	C5-6 facet dislocations (jumped)/perched facets
172	C5_6SbLigFDUB	Character	100	C5-6 facet dislocations (jumped)/perched facets type
173	C5_6SbLigSL	Numeric	8	C5-6 subluxation of one vertebral body on another
174	C5_6SbLigAL	Numeric	8	C5-6 angulation
175	C5_6SbLigSC	Numeric	8	C5-6 signal change on MRI
176	C5_6SbLigSCAL	Numeric	8	C5-6 signal change on MRIanterior ligaments/elements
177	C5_6SbLigSCDC	Numeric	8	C5-6 signal change on MRIdisc
178	C5_6SbLigSCWSC	Numeric	8	C5-6 signal change on MRIwithin spinal canal, including hematoma
179	C5_6SbLigSCPL	Numeric	8	C5-6 signal change on MRIposterior ligaments/elements
180	LigamentousInjuryC67	Numeric	8	If yes, C6-7 ligamentous injury

Variable Number	Variable Name	Variable Type	Variable Length	Variable Label
181	C6_7SbLigFD	Numeric	8	C6-7 facet dislocations (jumped)/perched facets
182	C6_7SbLigFDUB	Character	100	C6-7 facet dislocations (jumped)/perched facets type
183	C6_7SbLigSL	Numeric	8	C6-7 subluxation of one vertebral body on another
184	C6_7SbLigAL	Numeric	8	C6-7 angulation
185	C6_7SbLigSC	Numeric	8	C6-7 signal change on MRI
186	C6_7SbLigSCAL	Numeric	8	C6-7 signal change on MRIanterior ligaments/elements
187	C6_7SbLigSCDC	Numeric	8	C6-7 signal change on MRIdisc
188	C6_7SbLigSCWSC	Numeric	8	C6-7 signal change on MRIwithin spinal canal, including hematoma
189	C6_7SbLigSCPL	Numeric	8	C6-7 signal change on MRIposterior ligaments/elements
190	LigamentousInjuryC7T1	Numeric	8	If yes, C7-T1 ligamentous injury
191	C7_T1SbLigFD	Numeric	8	C7-T1 facet dislocations (jumped)/perched facets
192	C7_T1SbLigFDUB	Character	100	C7-T1 facet dislocations (jumped)/perched facets type
193	C7_T1SbLigSL	Numeric	8	C7-T1 subluxation of one vertebral body on another
194	C7_T1SbLigAL	Numeric	8	C7-T1 angulation
195	C7_T1SbLigSC	Numeric	8	C7-T1 signal change on MRI
196	C7_T1SbLigSCAL	Numeric	8	C7-T1 signal change on MRIanterior ligaments/elements
197	C7_T1SbLigSCDC	Numeric	8	C7-T1 signal change on MRIdisc
198	C7_T1SbLigSCWSC	Numeric	8	C7-T1 signal change on MRIwithin spinal canal, including hematoma
199	C7_T1SbLigSCPL	Numeric	8	C7-T1 signal change on MRIposterior ligaments/elements
200	CSpineSignalChange	Character	100	Was there signal changes in the cervical spinal cord on MRI?
201	SignalChangeLevelC1	Numeric	8	Signal changes in cervical spinal cord on MRIC1
202	SignalChangeLevelC2	Numeric	8	Signal changes in cervical spinal cord on MRIC2
203	SignalChangeLevelC3	Numeric	8	Signal changes in cervical spinal cord on MRIC3
204	SignalChangeLevelC4	Numeric	8	Signal changes in cervical spinal cord on MRIC4
205	SignalChangeLevelC5	Numeric	8	Signal changes in cervical spinal cord on MRIC5
206	SignalChangeLevelC6	Numeric	8	Signal changes in cervical spinal cord on MRIC6
207	SignalChangeLevelC7	Numeric	8	Signal changes in cervical spinal cord on MRIC7
208	CordInjuryNoRadiographic	Character	50	Does the patient have a spinal cord injury without radiographic association (SCIWORA)?

Were there fractures of the cervical spine?			
CSFractures Frequency Percent			
N	218	40.37	
Y	322	59.63	

Occipital condyle fracture			
CFracturesOC Frequency Perce			
0	531	98.33	
1	9	1.67	

C1 Fracture				
CFracturesC1 Frequency Percent				
0	505	93.52		
1	35	6.48		

C1 Fracture Arches				
C1SbFractureAR	Frequency	Percent		
0	520	96.30		
1	20	3.70		

C1 Fracture ArchesType			
C1SbFractureType	Frequency	Percent	
	520	96.30	
A	8	1.48	
J	4	0.74	
P	8	1.48	

C1 Fracture Transverse Process		
C1SbFractureTP Frequency Percent		
0	540	100.00

The FREQ Procedure

C1 Fracture Lateral Mass		
C1SbFractureLM Frequency Percen		Percent
0	528	97.78
1	12	2.22

C1 Fracture Other injury fracture			
C1SbFractureOI Frequency Percent			
0	535	99.07	
1	5	0.93	

C2 Fracture			
CFracturesC2 Frequency Percent			
0	426	78.89	
1	114	21.11	

C2 Fracture Odontoid		
C2SbFractureOdontoid Frequency Percent		
0	501	92.78
1	39	7.22

C2 Fracture Odontoid Type			
C2SbFractureOdType Frequency Percent			
	501	92.78	
1	2	0.37	
2	23	4.26	
3	14	2.59	

C2 Fracture Pars inerarticularis		
C2SbFracturePars Frequency Percent		Percent
0	524	97.04
1	16	2.96

C2 Fracture Pars inerarticularis type			
C2SbFractureTypePARS Frequency Percent			
	524	97.04	
BI	15	2.78	
UN	1	0.19	

C2 fracture, body other than odonotoid		
C2SbFractureBOOT Frequency Percent		
0	509	94.26
1	31	5.74

C2 fracture, body other than odonotoidWedge/compression		
C2SbFractureBOOTypeWC Frequency Perce		Percent
0	540	100.00

C2 fracture, body other than odonotoidBurst		
C2SbFractureBOOTypeBT Frequency Percent		
0	540	100.00

C2 fracture, body other than odonotoidTeardrop		
C2SbFractureBOOTypeTD Frequency Percent		
0	539	99.81
1	1	0.19

C2 fracture, body other than odonotoidLoss of height		
C2SbFractureBOOTypeLH	Frequency	Percent
0	540	100.00

The FREQ Procedure

C2 fracture, body other than odonotoidOther			
C2SbFractureBOOTypeOR	Frequency	Percent	
0	511	94.63	
1	29	5.37	

C2 lamina fracture		
C2SbFractureLA Frequency Percen		Percent
0	528	97.78
1	12	2.22

C2 lateral mass fracture		
C2SbFractureLM Frequency Percent		
0	531	98.33
1	9	1.67

C2 spinous process fracture		
C2SbFractureSP Frequency Percent		Percent
0	535	99.07
1	5	0.93

C2 other injury fracture		
C2SbFractureOR Frequency Percent		Percent
0	527	97.59
1	13	2.41

C3 fracture		
CFracturesC3	Frequency	Percent
0	513	95.00
1	27	5.00

C3 body fracture		
C3SbFractureBY Frequency Percent		
0	525	97.22
1	15	2.78

C3 body fracturewedge/compression		
C3SbFractureBYWC Frequency Percent		
0	534	98.89
1	6	1.11

C3 body fractureBurst		
C3SbFractureBYB Frequency Percent		
0	538	99.63
1	2	0.37

C3 body fractureTeardrop		
C3SbFractureBYTD Frequency Percent		
0	540	100.00

C3 body fractureLoss of height		
C3SbFractureBYLH Frequency Percent		
0	540	100.00

C3 body fractureOther		
C3SbFractureBYOR Frequency Percent		
0	532	98.52
1	8	1.48

C3 pedicle fracture		
C3SbFracturePE	Frequency	Percent
0	539	99.81
1	1	0.19

The FREQ Procedure

C3 pedicle fracture type			
C3SbFracturePEType Frequency Percent			
	539	99.81	
U	1	0.19	

C3 transverse process fracture		
C3SbFractureTP Frequency Percent		Percent
0	539	99.81
1	1	0.19

C3 lateral mass fracture			
C3SbFractureLM Frequency Percent			
0	537	99.44	
1	3	0.56	

C3 facet fracture		
C3SbFractureFT	Frequency	Percent
0	535	99.07
1	5	0.93

C3 facet fracture type			
C3SbFractureFTType Frequency Percent			
	535	99.07	
В	1	0.19	
U	4	0.74	

C3 lamina fracture		
C3SbFractureLA	Frequency	Percent
0	536	99.26
1	4	0.74

The FREQ Procedure

C3 spinous process fracture			
C3SbFractureSP Frequency Percent			
0	537	99.44	
1	3	0.56	

C3 canal compromise fracture			
C3SbFractureCC Frequency Percent			
0	538	99.63	
1	2	0.37	

C3 other injury fracture			
C3SbFractureOR Frequency Percent			
0	537	99.44	
1	3	0.56	

C4 fracture		
CFracturesC4	Frequency	Percent
0	498	92.22
1	42	7.78

C4 body fracture		
C4SbFractureBY	Frequency	Percent
0	510	94.44
1	30	5.56

C4 body fracturewedge/compression			
C4SbFractureBYWC Frequency Percent			
0	525	97.22	
1	15	2.78	

The FREQ Procedure

C4 body fractureBurst			
C4SbFractureBYB Frequency Percent			
0	534	98.89	
1	6	1.11	

C4 body fractureTeardrop			
C4SbFractureBYTD Frequency Percent			
0	537	99.44	
1	3	0.56	

C4 body fractureLoss of height			
C4SbFractureBYLH Frequency Percent			
0	535	99.07	
1	5	0.93	

C4 body fractureOther		
C4SbFractureBYOR Frequency Percent		
0	534	98.89
1	6	1.11

C4 pedicle fracture		
C4SbFracturePE	Frequency	Percent
0	534	98.89
1	6	1.11

C4 pedicle fracture type			
C4SbFracturePEType Frequency Percent			
	534	98.89	
U	6	1.11	

The FREQ Procedure

C4 transverse process fracture		
C4SbFractureTP Frequency Percent		Percent
0	536	99.26
1	4	0.74

C4 lateral mass fracture		
C4SbFractureLM Frequency Percent		
0	533	98.70
1	7	1.30

C4 facet fracture			
C4SbFractureFT Frequency Percent			
0	535	99.07	
1	5	0.93	

C4 facet fracture type			
C4SbFractureFTType Frequency Percent			
	535	99.07	
U	5	0.93	

C4 lamina fracture		
C4SbFractureLA	Frequency	Percent
0	531	98.33
1	9	1.67

C4 spinous process fracture		
C4SbFractureSP Frequency Percent		
0	536	99.26
1	4	0.74

The FREQ Procedure

C4 canal compromise fracture		
C4SbFractureCC Frequency Percent		
0	533	98.70
1	7	1.30

C4 other injury fracture		
C4SbFractureOR Frequency Percent		
0	536	99.26
1	4	0.74

C5 fracture			
CFracturesC5 Frequency Percent			
0	473	87.59	
1	67	12.41	

C5 body fracture		
C5SbFractureBY Frequency Percent		
0	492	91.11
1	48	8.89

C5 body fracturewedge/compression			
C5SbFractureBYWC Frequency Percent			
0	514	95.19	
1	26	4.81	

C5 body fractureBurst		
C5SbFractureBYB Frequency Percent		
0	530	98.15
1	10	1.85

The FREQ Procedure

C5 body fractureTeardrop		
C5SbFractureBYTD Frequency Percent		
0	535	99.07
1	5	0.93

C5 body fractureLoss of height		
C5SbFractureBYLH Frequency Percent		
0	530	98.15
1	10	1.85

C5 body fractureOther			
C5SbFractureBYOR Frequency Percent			
0	530	98.15	
1	10	1.85	

C5 pedicle fracture		
C5SbFracturePE Frequency Percent		
0	530	98.15
1	10	1.85

C5 pedicle fracture type			
C5SbFracturePEType Frequency Percent			
	530	98.15	
U	10	1.85	

C5 transverse process fracture		
C5SbFractureTP	Frequency	Percent
0	537	99.44
1	3	0.56

The FREQ Procedure

C5 lateral mass fracture			
C5SbFractureLM Frequency Percent			
0	534	98.89	
1	6	1.11	

C5 facet fracture			
C5SbFractureFT Frequency Percent			
0	532	98.52	
1	8	1.48	

C5 facet fracture type			
C5SbFractureFTType Frequency Percent			
	532	98.52	
В	2	0.37	
U	6	1.11	

C5 lamina fracture			
C5SbFractureLA Frequency Percent			
0	531	98.33	
1	9	1.67	

C5 spinous process fracture			
C5SbFractureSP Frequency Percent			
0	535	99.07	
1	5	0.93	

C5 canal compromise fracture		
C5SbFractureCC Frequency Percen		Percent
0	531	98.33
1	9	1.67

C5 other injury fracture		
C5SbFractureOR	SbFractureOR Frequency Perce	
0	540	100.00

C6 fracture		
CFracturesC6	Frequency	Percent
0	478	88.52
1	62	11.48

C6 body fracture		
C6SbFractureBY	Frequency	Percent
0	499	92.41
1	41	7.59

C6 body fracturewedge/compression			
C6SbFractureBYWC Frequency Percent			
0	516	95.56	
1	24	4.44	

C6 body fractureBurst			
C6SbFractureBYB Frequency Percent			
0	535	99.07	
1	5	0.93	

C6 body fractureTeardrop		
C6SbFractureBYTD Frequency Percent		
0	539	99.81
1	1	0.19

C6 body fractureLoss of height		
C6SbFractureBYLH Frequency Percent		
0	536	99.26
1	4	0.74

The FREQ Procedure

C6 body fractureOther			
C6SbFractureBYOR Frequency Percent			
0	527	97.59	
1	13	2.41	

C6 pedicle fracture		
C6SbFracturePE Frequency Percent		
0	529	97.96
1	11	2.04

C6 pedicle fracture type		
C6SbFracturePEType Frequency Percent		
	529	97.96
U	11	2.04

C6 transverse process fracture		
C6SbFractureTP Frequency Percent		
0	539	99.81
1	1	0.19

C6 lateral mass fracture		
C6SbFractureLM Frequency Percent		
0	535	99.07
1	5	0.93

C6 facet fracture		
C6SbFractureFT Frequency Percent		
0	535	99.07
1	5	0.93

The FREQ Procedure

C6 facet fracture type		
C6SbFractureFTType	Frequency	Percent
	535	99.07
В	1	0.19
U	4	0.74

C6 lamina fracture		
C6SbFractureLA	Frequency	Percent
0	531	98.33
1	9	1.67

C6 spinous process fracture		
C6SbFractureSP Frequency Percent		
0	531	98.33
1	9	1.67

C6 canal compromise fracture			
C6SbFractureCC Frequency Percent			
0	535	99.07	
1	5	0.93	

C6 other injury fracture		
C6SbFractureOR Frequency Percent		
0	539	99.81
1	1	0.19

C7 fracture		
CFracturesC7 Frequency Percent		Percent
0	463	85.74
1	77	14.26

C7 body fracture		
C7SbFractureBY	Frequency	Percent
0	512	94.81
1	28	5.19

C7 body fracturewedge/compression		
C7SbFractureBYWC Frequency Percent		
0	525	97.22
1	15	2.78

C7 body fractureBurst		
C7SbFractureBYB Frequency Percent		
0	535	99.07
1	5	0.93

C7 body fractureTeardrop			
C7SbFractureBYTD Frequency Percent			
0	540	100.00	

C7 body fractureLoss of height		
C7SbFractureBYLH Frequency Percent		
0	534	98.89
1	6	1.11

C7 body fractureOther			
C7SbFractureBYOR Frequency Percent			
0	537	99.44	
1	3	0.56	

C7 pedicle fracture		
C7SbFracturePE	Frequency	Percent
0	534	98.89
1	6	1.11

C7 pedicle fracture type		
C7SbFracturePEType Frequency Percent		
	534	98.89
U	6	1.11

C7 transverse process fracture		
C7SbFractureTP Frequency Percent		
0	527	97.59
1	13	2.41

C7 lateral mass fracture			
C7SbFractureLM Frequency Percent			
0	539	99.81	
1	1	0.19	

C7 facet fracture		
C7SbFractureFT	Frequency	Percent
0	538	99.63
1	2	0.37

C7 facet fracture type		
C7SbFractureFTType	Frequency	Percent
	538	99.63
U	2	0.37

C7 lamina fracture		
C7SbFractureLA Frequency Percent		
0	538	99.63
1	2	0.37

The FREQ Procedure

C7 spinous process fracture		
C7SbFractureSP Frequency Percent		
0	505	93.52
1	35	6.48

C7 canal compromise fracture		
C7SbFractureCC Frequency Percent		
0	537	99.44
1	3	0.56

C7 other injury fracture		
C7SbFractureOR	Frequency Percent	
0	540	100.00

Were there ligamentous injuries to the cervical spinal column?		
Ligamentoptions Frequency Percent		Percent
N	260	48.15
Y	280	51.85

If yes, occipital-atlantal dislocation			
LigamentousInjuryOAD Frequency Percent			
0	510	94.44	
1	30	5.56	

If yes, C1-2 ligamentous injury		
LigamentousInjuryC12 Frequency Percent		
0	397	73.52
1	143	26.48

C1-2 facet dislocations (jumped)/perched facets		
C1_2SbLigFD	Frequency	Percent
0	537	99.44
1	3	0.56

C1-2 facet dislocations (jumped)/perched facets type		
C1_2SbLigFDUB Frequency Percent		
	537	99.44
В	1	0.19
U	2	0.37

C1-2 subluxation of one vertebral body on another		
C1_2SbLigSL	Frequency	Percent
0	453	83.89
1	87	16.11

C1-2 atlantoaxial rotary subluxation		
C1_2SbLigSLARS Frequency Percer		Percent
0	481	89.07
1	59	10.93

C1-2 ADI interval > 5mm		
C1_2SbLigSLADI Frequency Percent		Percent
0	521	96.48
1	19	3.52

C1-2 angulation		
C1_2SbLigAL	Frequency	Percent
0	532	98.52
1	8	1.48

C1-2 signal change on MRI		
C1_2SbLigSC Frequency Percent		Percent
0	480	88.89
1	60	11.11

C1-2 signal change on MRIanterior ligaments/elements		
C1_2SbLigSCAL	Frequency	Percent
0	524	97.04
1	16	2.96

C1-2 signal change on MRIdisc		
C1_2SbLigSCDC Frequency Percent		
0	539	99.81
1	1	0.19

C1-2 signal change on MRIwithin spinal canal, including hematoma		
C1_2SbLigSCWSC	Frequency	Percent
0	519	96.11
1	21	3.89

C1-2 signal change on MRIposterior ligaments/elements		
C1_2SbLigSCPL	Frequency	Percent
0	499	92.41
1	41	7.59

If yes, C2-3 ligamentous injury		
LigamentousInjuryC23 Frequency Percent		
0	490	90.74
1	50	9.26

C2-3 facet dislocations (jumped)/perched facets		
C2_3SbLigFD	Frequency	Percent
0	536	99.26
1	4	0.74

C2-3 facet dislocations (jumped)/perched facets type		
C2_3SbLigFDUB Frequency Percent		Percent
	536	99.26
В	3	0.56
U	1	0.19

C2-3 subluxation of one vertebral body on another		
C2_3SbLigSL	Frequency	Percent
0	517	95.74
1	23	4.26

C2-3 angulation		
C2_3SbLigAL Frequency Percent		
0	525	97.22
1	15	2.78

C2-3 signal change on MRI		
C2_3SbLigSC Frequency Percent		Percent
0	506	93.70
1	34	6.30

C2-3 signal change on MRIanterior ligaments/elements		
C2_3SbLigSCAL	Frequency	Percent
0	536	99.26
1	4	0.74

The FREQ Procedure

C2-3 signal change on MRIdisc		
C2_3SbLigSCDC Frequency Percent		
0	531	98.33
1	9	1.67

C2-3 signal change on MRIwithin spinal canal, including hematoma		
C2_3SbLigSCWSC Frequency Percent		
0	524	97.04
1	16	2.96

C2-3 signal change on MRIposterior ligaments/elements		
C2_3SbLigSCPL	Frequency	Percent
0	521	96.48
1	19	3.52

If yes, C3-4 ligamentous injury			
LigamentousInjuryC34 Frequency Percent			
0	498	92.22	
1	42	7.78	

C3-4 facet dislocations (jumped)/perched facets		
C3_4SbLigFD	Frequency	Percent
0	537	99.44
1	3	0.56

C3-4 facet dislocations (jumped)/perched facets type		
C3_4SbLigFDUB Frequency Percent		
	537	99.44
В	1	0.19
U	2	0.37

C3-4 subluxation of one vertebral body on another		
C3_4SbLigSL	Frequency	Percent
0	529	97.96
1	11	2.04

C3-4 angulation		
C3_4SbLigAL	Frequency	Percent
0	534	98.89
1	6	1.11

C3-4 signal change on MRI		
C3_4SbLigSC	Frequency	Percent
0	506	93.70
1	34	6.30

C3-4 signal change on MRIanterior ligaments/elements		
C3_4SbLigSCAL	Frequency	Percent
0	536	99.26
1	4	0.74

C3-4 signal change on MRIdisc		
C3_4SbLigSCDC Frequency Percent		
0	537	99.44
1	3	0.56

C3-4 signal change on MRIwithin spinal canal, including hematoma		
C3_4SbLigSCWSC	Frequency	Percent
0	525	97.22
1	15	2.78

C3-4 signal change on MRIposterior ligaments/elements		
C3_4SbLigSCPL	Frequency	Percent
0	524	97.04
1	16	2.96

If yes, C4-5 ligamentous injury			
LigamentousInjuryC45 Frequency Percent			
0	489	90.56	
1	51	9.44	

C4-5 facet dislocations (jumped)/perched facets		
C4_5SbLigFD	Frequency	Percent
0	536	99.26
1	4	0.74

C4-5 facet dislocations (jumped)/perched facets type		
C4_5SbLigFDUB	Frequency	Percent
	536	99.26
В	4	0.74

C4-5 subluxation of one vertebral body on another		
C4_5SbLigSL	Frequency	Percent
0	526	97.41
1	14	2.59

C4-5 angulation		
C4_5SbLigAL Frequency Percent		Percent
0	533	98.70
1	7	1.30

The FREQ Procedure

C4-5 signal change on MRI		
C4_5SbLigSC Frequency Percent		Percent
0	502	92.96
1	38	7.04

C4-5 signal change on MRIanterior ligaments/elements		
C4_5SbLigSCAL	Frequency	Percent
0	537	99.44
1	3	0.56

C4-5 signal change on MRIdisc		
C4_5SbLigSCDC Frequency Percent		
0	536	99.26
1	4	0.74

C4-5 signal change on MRIwithin spinal canal, including hematoma		
C4_5SbLigSCWSC	Frequency	Percent
0	528	97.78
1	12	2.22

C4-5 signal change on MRIposterior ligaments/elements		
C4_5SbLigSCPL	Frequency	Percent
0	513	95.00
1	27	5.00

If yes, C5-6 ligamentous injury		
LigamentousInjuryC56 Frequency Percent		
0	487	90.19
1	53	9.81

C5-6 facet dislocations (jumped)/perched facets		
C5_6SbLigFD	Frequency	Percent
0	533	98.70
1	7	1.30

C5-6 facet dislocations (jumped)/perched facets type		
C5_6SbLigFDUB Frequency Percent		Percent
	533	98.70
В	6	1.11
U	1	0.19

C5-6 subluxation of one vertebral body on another		
C5_6SbLigSL	Frequency	Percent
0	523	96.85
1	17	3.15

C5-6 angulation		
C5_6SbLigAL	Frequency	Percent
0	530	98.15
1	10	1.85

C5-6 signal change on MRI		
C5_6SbLigSC Frequency Perc		Percent
0	497	92.04
1	43	7.96

C5-6 signal change on MRIanterior ligaments/elements		
C5_6SbLigSCAL	Frequency	Percent
0	538	99.63
1	2	0.37

The FREQ Procedure

C5-6 signal change on MRIdisc		
C5_6SbLigSCDC Frequency Percent		
0	534	98.89
1	6	1.11

C5-6 signal change on MRIwithin spinal canal, including hematoma		
C5_6SbLigSCWSC	Frequency	Percent
0	520	96.30
1	20	3.70

C5-6 signal change on MRIposterior ligaments/elements		
C5_6SbLigSCPL	Frequency	Percent
0	518	95.93
1	22	4.07

If yes, C6-7 ligamentous injury		
LigamentousInjuryC67 Frequency Percent		
0	502	92.96
1	38	7.04

C6-7 facet dislocations (jumped)/perched facets		
C6_7SbLigFD	Frequency	Percent
0	532	98.52
1	8	1.48

C6-7 facet dislocations (jumped)/perched facets type		
C6_7SbLigFDUB Frequency Percent		
	532	98.52
В	1	0.19
U	7	1.30

C6-7 subluxation of one vertebral body on another			
C6_7SbLigSL Frequency Percent			
0	533	98.70	
1	7	1.30	

C6-7 angulation			
C6_7SbLigAL Frequency Percent			
0	536	99.26	
1	4	0.74	

C6-7 signal change on MRI			
C6_7SbLigSC Frequency Percent			
0	512	94.81	
1	28	5.19	

C6-7 signal change on MRIanterior ligaments/elements		
C6_7SbLigSCAL	Frequency	Percent
0	537	99.44
1	3	0.56

C6-7 signal change on MRIdisc		
C6_7SbLigSCDC Frequency Percent		
0	533	98.70
1	7	1.30

C6-7 signal change on MRIwithin spinal canal, including hematoma		
C6_7SbLigSCWSC	Frequency	Percent
0	529	97.96
1	11	2.04

C6-7 signal change on MRIposterior ligaments/elements		
C6_7SbLigSCPL	Frequency	Percent
0	524	97.04
1	16	2.96

If yes, C7-T1 ligamentous injury			
LigamentousInjuryC7T1	Frequency	Percent	
0	526	97.41	
1	14	2.59	

C7-T1 facet dislocations (jumped)/perched facets		
C7_T1SbLigFD Frequency Percent		Percent
0	540	100.00

C7-T1 facet dislocations (jumped)/perched facets type		
C7_T1SbLigFDUB	Frequency	Percent
	540	100.00

C7-T1 subluxation of one vertebral body on another		
C7_T1SbLigSL	Frequency	Percent
0	540	100.00

C7-T1 angulation		
C7_T1SbLigAL	Frequency	Percent
0	540	100.00

C7-T1 signal change on MRI		
C7_T1SbLigSC	Frequency	Percent
0	526	97.41
1	14	2.59

C7-T1 signal change on MRIanterior ligaments/elements		
C7_T1SbLigSCAL	Frequency	Percent
0	539	99.81
1	1	0.19

C7-T1 signal change on MRIdisc		
C7_T1SbLigSCDC	Frequency	Percent
0	540	100.00

C7-T1 signal change on MRIwithin spinal canal, including hematoma		
C7_T1SbLigSCWSC	Frequency	Percent
0	534	98.89
1	6	1.11

C7-T1 signal change on MRIposterior ligaments/elements		
C7_T1SbLigSCPL	Frequency	Percent
0	534	98.89
1	6	1.11

Was there signal changes in the cervical spinal cord on MRI?		
CSpineSignalChange	Frequency	Percent
N	215	39.81
NA	229	42.41
Y	96	17.78

Signal changes in cervical spinal cord on MRIC1		
SignalChangeLevelC1	Frequency	Percent
0	511	94.63
1	29	5.37

Signal changes in cervical spinal cord on MRIC2		
SignalChangeLevelC2	Frequency	Percent
0	485	89.81
1	55	10.19

Signal changes in cervical spinal cord on MRIC3		
SignalChangeLevelC3	Frequency	Percent
0	498	92.22
1	42	7.78

Signal changes in cervical spinal cord on MRIC4			
SignalChangeLevelC4	Frequency	Percent	
0	500	92.59	
1	40	7.41	

Signal changes in cervical spinal cord on MRIC5			
SignalChangeLevelC5	Frequency	Percent	
0	494	91.48	
1	46	8.52	

Signal changes in cervical spinal cord on MRIC6			
SignalChangeLevelC6	Frequency	Percent	
0	503	93.15	
1	37	6.85	

Signal changes in cervical spinal cord on MRIC7			
SignalChangeLevelC7	Frequency	Percent	
0	522	96.67	
1	18	3.33	

Does the patient have a spinal cord injury without radiographic association (SCIWORA)?			
CordInjuryNoRadiographic	Frequency	Percent	
N	472	87.41	
Y	68	12.59	