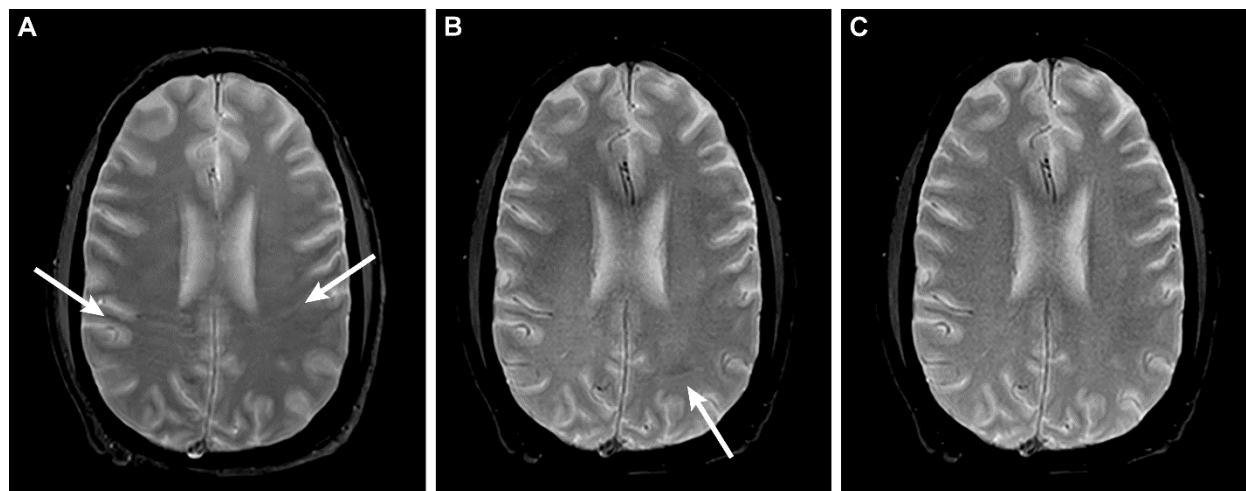
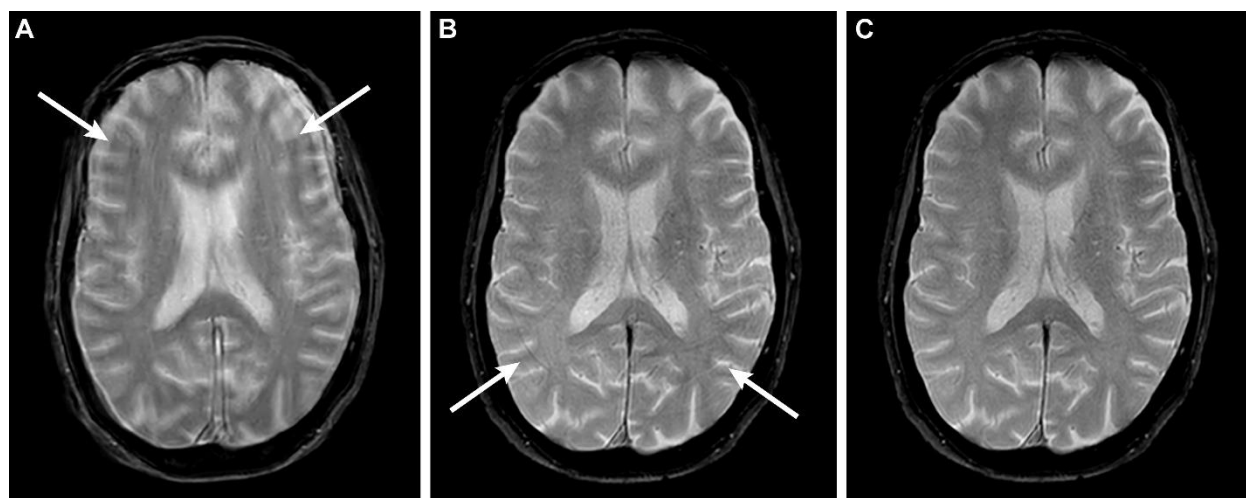


SUPPLEMENTAL MATERIALS

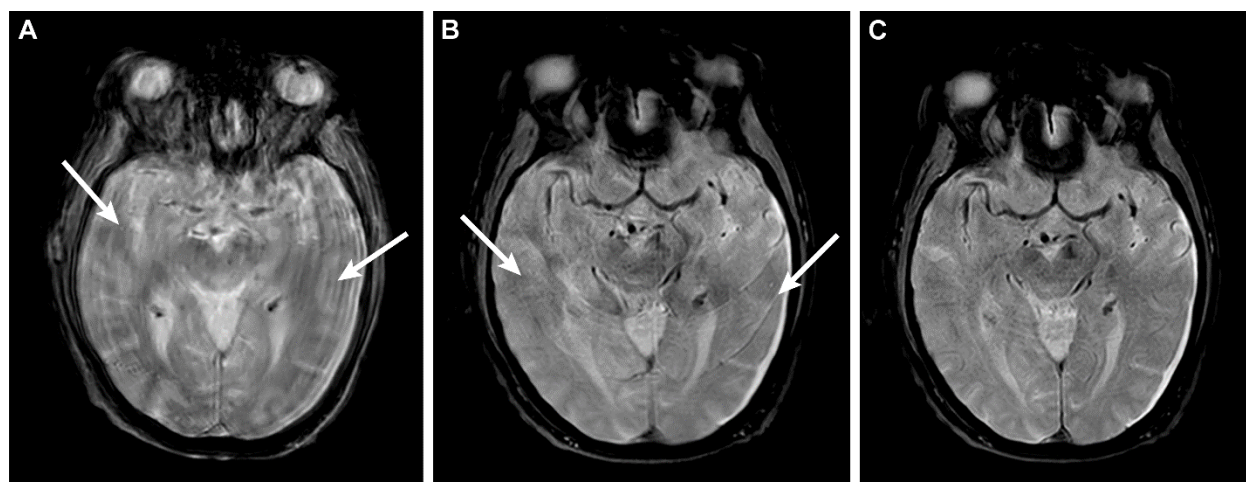
SUPPLEMENTAL FIGURES



Supplemental Figure 1. Axial MR images of a patient showing the effects of motion artifact (white arrows) on (A) standard gradient recalled-echo (GRE) imaging and (B) non-motion-corrected multi-shot echo planar imaging (msEPI), compared with (C) motion-corrected msEPI. Used with permission from Barrow Neurological Institute, Phoenix, Arizona.



Supplemental Figure 2. Axial MR images of a second patient showing the effects of motion artifact (white arrows) on (A) standard gradient recalled-echo (GRE) imaging and (B) non-motion-corrected multi-shot echo planar imaging (msEPI), compared with (C) motion-corrected msEPI. Used with permission from Barrow Neurological Institute, Phoenix, Arizona.



Supplemental Figure 3. Axial MR images of a patient with left midbrain hemorrhage showing the effects of motion artifact (*white arrows*) on **(A)** standard gradient recalled-echo (GRE) imaging and **(B)** non-motion-corrected multi-shot echo planar imaging (msEPI), compared with **(C)** motion-corrected msEPI. *Used with permission from Barrow Neurological Institute, Phoenix, Arizona.*

Supplemental Table 1. Analysis of motion artifact, skull base susceptibility artifact, overall image quality, and lesion conspicuity in 137 patients.

Patient	Motion artifact	Skull base susceptibility artifact	Overall image quality	Lesion conspicuity
1	4	2	4	NA
2	3	2	4	5
3	4	2	4	NA
4	3	2	4	3
5	3	2	3	3
6	3	3	4	NA
7	3	2	3	3
8	4	2	4	NA
9	4	2	4	NA
10	4	2	4	NA
11	4	2	4	NA
12	5	3	5	5
13	4	2	4	5
14	4	2	4	NA
15	4	2	4	4
16	4	2	4	4
17	4	4	5	NA
18	5	4	5	NA
19	3	2	4	NA
20	5	2	5	4
21	3	2	3	3
22	3	2	4	NA
23	4	2	4	3
24	3	3	4	NA
25	3	2	4	2
26	4	2	4	NA
27	3	2	4	NA
28	3	2	4	4
29	3	2	4	NA
30	4	3	4	4
31	3	2	3	NA
32	3	2	3	3
33	4	2	4	NA
34	4	2	4	3
35	4	2	4	NA

36	3	2	4	4
37	3	2	4	4
38	4	2	4	NA
39	3	2	3	NA
40	4	2	4	NA
41	4	2	5	NA
42	4	3	4	4
43	3	2	4	NA
44	4	2	4	NA
45	3	2	4	5
46	3	2	4	NA
47	3	2	4	NA
48	3	2	4	NA
49	5	2	5	NA
50	3	2	4	NA
51	2	2	2	NA
52	5	2	5	4
53	4	2	4	NA
54	3	2	4	NA
55	3	3	4	NA
56	2	2	2	NA
57	4	3	4	4
58	3	2	4	NA
59	4	2	4	3
60	3	2	4	4
61	5	3	4	NA
62	3	2	4	4
63	4	2	4	3
64	4	2	4	NA
65	4	2	4	NA
66	3	2	4	NA
67	5	4	5	NA
68	4	2	4	NA
69	4	2	4	NA
70	4	2	4	NA
71	3	2	4	3
72	4	2	4	NA
73	4	2	4	NA
74	3	2	4	NA
75	4	2	4	NA

76	3	2	4	3
77	4	2	4	NA
78	5	2	5	NA
79	3	2	3	NA
80	3	2	4	NA
81	3	2	4	4
82	4	2	4	3
83	3	2	3	NA
84	3	2	3	NA
85	2	2	3	NA
86	3	2	4	4
87	3	3	4	NA
88	3	2	3	3
89	3	2	4	4
90	3	2	3	NA
91	4	2	4	NA
92	3	2	4	NA
93	3	2	4	5
94	4	2	4	3
95	3	2	4	NA
96	4	2	4	4
97	3	2	4	4
98	3	2	4	3
99	3	2	3	NA
100	4	2	4	NA
101	3	2	4	3
102	4	2	4	NA
103	3	2	4	NA
104	3	2	3	3
105	3	2	4	NA
106	5	4	5	4
107	3	2	4	3
108	3	2	3	NA
109	4	3	4	NA
110	4	2	4	NA
111	3	2	4	4
112	3	2	4	NA
113	4	2	4	4
114	4	2	4	NA
115	3	2	4	NA

116	4	3	5	NA
117	3	2	4	4
118	3	3	4	NA
119	5	3	5	4
120	3	2	3	NA
121	3	2	4	NA
122	3	1	3	3
123	4	2	4	NA
124	3	2	4	NA
125	5	2	5	5
126	3	2	2	NA
127	4	2	5	5
128	5	3	5	NA
129	3	2	2	NA
130	3	2	4	4
131	3	2	4	NA
132	4	2	5	4
133	4	2	4	NA
134	3	2	4	NA
135	3	2	4	5
136	3	2	4	NA
137	5	2	5	5
