



Functional Outcomes in Inferior Medial Pontine Syndrome (Foville Syndrome): A Case Report

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Case Description

- 71-year-old male presented to the emergency department with acute-onset dysphagia, dysarthria, left facial weakness, right hemiplegia, and left lateral gaze weakness
- Imaging revealed partial occlusion of the basilar artery resulting in left pontine and left medullary infarction

Clinical Course

- Acute hospital course complicated by aspiration pneumonia due to dysphagia
- Discharged to an inpatient rehabilitation facility (IRF) and obtained physical therapy (PT), occupational therapy (OT), and speech therapy (ST)
- Initial IRF length of stay (LOS) 24 days
- Discharged home with home therapies on a mechanical soft diet with nectar liquids
- Dysphagia resolved with home therapies
- 6 months later hospitalized for a urinary tract infection
- Developed spasticity as late effect of stroke
- Again discharged to an IRF and received PT, OT, and ST
- Second IRF LOS was 23 days with discharge home with home therapies

Results

- During initial rehabilitation, overall Functional Independence Measure (FIM) score increased from 35 on admission to 63 on discharge
- Greatest improvements made in bowel and bladder status, upper body dressing, and expression

Functional Independence Measures	First IRF Admission	First IRF Discharge	Second IRF Admission	Second IRF Discharge
Eating	4	4	5	5
Grooming	4	5	3	5
Bathing	1	3	0	3
Upper Body Dressing	1	4	3	4
Lower Body Dressing	1	1	1	2
Toileting	1	1	1	1
Bladder	1	4	1	5
Bowel	1	6	1	5
Bed, Chair, Wheelchair	1	3	2	4
Toilet Transfer	1	3	2	4
Tub/Shower Transfer	0	3	0	4
Locomotion - Walk	1	1	-	-
Locomotion - Wheelchair	-	-	1	5
Comprehension	5	5	4	7
Expression	1	4	3	5
Social Interaction	5	5	4	7
Problem Solving	3	5	3	5
Memory	4	5	3	6

Results - continued

- Function decreased in the interim due to spasticity and infection
- During second rehabilitation stay, overall FIM score increased from 37 on admission to 77 on discharge
- Greatest improvements made in bowel and bladder status, wheelchair locomotion, comprehension, expression, social interaction, and memory

Discussion

- This cluster of findings is consistent with Foville Syndrome, characterized by compromise to the paramedian branches or short circumferential arteries of the basilar artery
- Pathology includes:
 - Contralateral hemiplegia due to involvement of the corticospinal tract
 - Ipsilateral facial weakness due to involvement of cranial nerve VII nucleus
 - Ipsilateral lateral gaze weakness due to involvement of the paramedian pontine reticular formation and/or abducens nerve nucleus
- Foville Syndrome diffusely affects function by interfering with self care, mobility, swallowing, and communication

Conclusion

- Patients that undergo inpatient rehabilitation can be comprehensively treated for early and late effects of Foville syndrome
- This is the first noted report of Foville Syndrome functional outcome measures

