

The management and outcomes of Bell’s Palsy & Pregnancy associated Bell’s Palsy in a dedicated multidisciplinary facial nerve clinic

Authors

T Stefoulis¹, R Hayler², J Lee², E Charters²,
S Coulson², G Hussein², TH Low²

Affiliations

¹Royal Prince Alfred Hospital, Sydney, Australia
²Chris O’Brien Lifehouse, Sydney, Australia

Introduction

We aim to evaluate the presentation & severity of disease, as well as the impact on their quality of life between those with idiopathic Bell’s palsy (IBP) and those with pregnancy associated Bell’s palsy (PABP).

Methodology

Patients were identified from a prospectively maintained database at the Sydney Facial Nerve Clinic (SFNC). Demographic data alongside validated quality of life scores, including Synkinesis Assessment Questionnaire (SAQ) and Facial Disability Index Social & Physical (FDIS. FDIP), as well as Clinician assessment with House-Brackmann Score (HB) and Sunnybrook Facial Grading System (SFGS) were extracted.

Conclusion

Patients with PABP tend to present at a younger age. Both IBP and PABP has similar severity of symptoms, however PABP group tends to have more severe oral symptoms yet an overall better social function when compared to IBP.

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Results

Between May 2015 to March 2023, 145 patients were identified with Bell’s palsy, of which 32 had PABP. Patients with PABP were typically of a younger age (38.2 years +/- 7.9 years vs 46.4 years +/- 15.605, p value 0.005) and presented at a younger age (33.2 years +/- 5.77 years vs 40.3 years +/- 16.641 years p value 0.018). Both groups had similar HB mean scores (3.48 PABP, 3.18 IBP, p value 0.189) and SFGS mean scores (PABP 55.55, IBP 54.57, p value 0.834), indicating similar severity of presentation when assessed by the clinician. SAQ scores were similar between the groups (mean PABP 54.07, IBP 46.61, p value 0.834).

FDI subgroup analysis showed that the PABP group had more difficulties with their oral function with teeth brushing and rinsing (mean PABP 3.19, IBP 3.79, p value 0.006), yet had better overall social function as defined by FDI-S analysis (mean PABP 51.87, IBP 60.45, p value 0.021). Treatment consisted of botulinum toxin injection (72.22% of PABP, 73.81% of IBP) and physiotherapy (94.44% of PABP, 86.90% if IBP) (% of each group that received this).

	Non pregnant	Pregnant
Age		
n	113	32
Median, Mean	(45, 46.39)	(36, 38.19)
P Value	0.005	
Age Onset		
n	113	32
Median, Mean	(40, 40.36)	(33.50, 33.22)
P Value	0.018	
HB		
n	88	27
Median, Mean	(3, 3.18)	(3, 3.48)
P Value	0.189	
SFGS		
n	97	31
Median, Mean	(52, 54.57)	(56, 55.55)
P Value	0.834	
SAQ Total		
n	37	12
Median, Mean	(42.22, 46.61)	(58.89, 54.07)
P Value	0.834	

	Non pregnant	Pregnant
FDIS1		
n	107	30
Median, Mean	(4.00, 3.50)	(3.00, 3.33)
P Value	0.505	
FDIS2		
n	107	30
Median, Mean	(4.00, 4.22)	(4.00, 4.17)
P Value	0.831	
FDIS3		
n	107	30
Median, Mean	(5.00, 4.45)	(4, 3.97)
P Value	0.076	
FDIS4		
n	107	30
Median, Mean	(4.00, 3.5)	(2.00, 2.63)
P Value	0.008	
FDIS5		
n	107	30
Median, Mean	(4.00, 4.43)	(4, 3.87)
P Value	0.048	
FDISTOT		
n	107	30
Median, Mean	(60, 60.45)	(54, 51.87)
P Value	0.021	