CASE DISCUSSION

Presentor: R1 簡珮如

Instructor: VS 廖文輝

2014-09-26

General data

- Name：鐘 ○○
- Chart No.：416x31x2
- Gender：Female
- Age: 38 y/o
- Occupation：none
- Admission date：2014/09/12

CHIEF COMPLAINT

- Left facial palsy with otalgia for 2 days.

BRIEF HISTORY

- No underlying disease
- Left facial palsy with otalgia for 2 days
- Accompanied with left facial numbness & pain, left retroauricular swelling pain, and a small vesicle over left ear pinna
- PE: left facial palsy, grade V to VI; one small vesicle over left ear pinna
- Otoscopy: Bil. intact ear drums

臺北榮民總醫院

耳鼻喉頭頸部

聽力檢查表

病歷號碼：

姓名：

年齡：

電話

地址

準確性

保險證號：

Pure Tone Audiogram

Weber

L R

Rinne

Audiogram Code	A.C.	AC masking	N.R	B.C. mastoid	B.C. mastoid masked	N.R.	Sound Field	A
RT	○	△	∠°	<	[	⚡	S	
LT	×	□	⟍	>	]	↯		

125 250 500 1000 2000 4000 8000

-10 0 10 20 30 40 50 60 70 80 90 100 110 120

Hearing Threshold Levels in Decibels (ANSI 36)

Frequency in Hertz (Hz)

Masking Level	Ac						
	BC						

Tympanogram

R L

Compliance

Air Pressure

E-tube Function

Rt (probe)	Lt (probe)
good ( )	good ( )
fair ( )	fair ( )
poor ( )	poor ( )

Acoustic Reflex

Rihgt			Left	
Ipsilateral threshold dB	Contralateral threshold dB	freq Hz	Contralateral threshold dB	Ipsilater threshol dB
		500		
		1000		
		2000		
		4000		

Speech audiometry

Right				Left			
SRT	WDS SL / %	MCL	UCL	SRT	WDS SL / %	MCL	UCL

Reflex Decay

Ear	500 Hz	1000 Hz
R		
L		

	SNHL	Cond HL	Mixed HL	Normal
Right	( )	( )	( )	(✓)
Left	( )	( )	( )	( )

SISI:

Hz				
%				
%				

Tone Decay:

Hz				
20dBSL				
20dBSL				

Remarks:

No. 7-208-03 (215×280)mm MR6-3-2 103. 7.(亞搭)

PTA

LAB

- WBC: 8600, Hb: 11.5, PLT: 326K
- BUN/Cr: 10/0.75; Na/K: 142/3.6
- AST/ALT: 38/38

FINAL DIAGNOSIS

- Left facial palsy, suspect Bell's palsy, r/o Ramsay-Hunt syndrome

TREATMENT

- Decadron 5mg BID and Valaciclovir for 5 days (9/12-9/16)

DISCUSSION

Original Article

Journal of INTERNAL MEDICINE

doi: 10.1111/joim.12288

Steroid plus antiviral treatment for Bell's palsy

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Abstract. Kang HM, Jung SY, Byun JY, Park MS, Yeo SG (Kyung Hee University, Seoul, Korea). Steroid plus antiviral treatment for Bell's palsy. *J Intern Med* 2014; doi: 10.1111/joim.12288.

Objectives. The effectiveness of antiviral agents for the treatment of Bell's palsy is uncertain. We evaluated whether a steroid with an antiviral agent (S + A group) provided better recovery outcomes than a steroid alone (S group) in patients with Bell's palsy.

Subjects and design. A total of 1342 patients diagnosed with Bell's palsy who visited the Kyung Hee Medical Center in Seoul, Korea, from 2002 to 2012 were included in this study. Patients in the S + A group were treated with prednisolone and antiviral agents (n = 569) and those in the S group with prednisolone alone (n = 773). Outcomes were measured using the House–Brackmann (HB) scale according to age, initial disease severity, electroneurography (ENoG) findings and underlying comorbidities.

Results. The rate of recovery (HB grades I and II) with initially severe Bell's palsy (HB grades V and VI) was higher in the S + A than in the S group

Prednisolone: (total 14 days)

Adult(>16 y/o)	Children
80mg/D x 4 day	1mg/kg/D
60mg/D x 2 day	Gradually ↓
40mg/D x 2 day	
20mg/D x 2 day	
10mg/D x 4 day	

Antiviral agents:

Acyclovir: 1000-2400 mg/day x5 days

Famciclovir: 750mg/day x7 days

Exclusion: vesicular eruption of the auricle or tympanic membrane or a defined lesion of the CP angle or central nervous system by brain or temporal MRI. History of middle ear disease.

ment of Bell's palsy.

Keywords: age, antivirals, Bell's palsy, electroneurography, severity, steroid.

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Results. The rate of recovery (HB grades I and II) with initially severe Bell's palsy (HB grades V and VI) was higher in the S + A than in the S group ($P = 0.001$). However, the rates of recovery were similar with initially moderate palsy (HB grades II–IV) ($P = 0.502$). In patients classified according to age and ENoG-determined severity of palsy, the overall recovery rate was higher in the S + A than in the S group, but the differences were not statistically significant ($P > 0.05$ for both). The recovery rate without diabetes mellitus (DM) and hypertension (HTN) was higher in the S + A group than in the S group ($P = 0.031$). But in the patients with HTN and DM, the difference in recovery rates between the S + A and S groups was not statistically significant ($P = 0.805$).

Conclusions. Treatment with a steroid plus antiviral agent resulted in significantly higher recovery rates than steroid therapy alone in patients with initially severe Bell's palsy and without either HTN or DM, and a nonsignificant trend towards higher recovery rates in all patients with Bell's palsy in this study. Antiviral agents may therefore help in the treatment of Bell's palsy.

Riga *et al.*: Bell's palsy is caused by microcirculatory failure of the vasa nervosum.

Steroid-antiviral Treatment Improves the Recovery Rate in Patients with Severe Bell's Palsy

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ABSTRACT

BACKGROUND: The extent of facial nerve damage is expected to be more severe in higher grades of facial palsy, and the outcome after applying different treatment methods may reveal obvious differences between severe Bell's palsy and mild to moderate palsy. This study aimed to systematically evaluate the effects of different treatment methods and related prognostic factors in severe to complete Bell's palsy.

METHODS: This randomized, prospective study was performed in patients with severe to complete Bell's palsy. Patients were assigned randomly to treatment with a steroid or a combination of a steroid and an antiviral agent. We collected data about recovery and other prognostic factors.

RESULTS: The steroid treatment group (S group) comprised 107 patients, and the combination treatment group (S+A group) comprised 99 patients. There were no significant intergroup differences in age, sex, accompanying disease, period from onset to treatment, or results of an electrophysiology test ($P > .05$). There was a significant difference in complete recovery between the 2 groups. The recovery (grades I and II) of the S group was 66.4% and that of the S+A group was 82.8% ($P = .010$). The S+A group showed a 2.6-times higher possibility of complete recovery than the S group, and patients with favorable electromyography showed a 2.2-times higher possibility of complete recovery.

CONCLUSIONS: Combined treatment with a steroid and an antiviral agent is more effective in treating severe to complete Bell's palsy than steroid treatment alone.

 • *The American Journal of Medicine (2013) 126, 336-341*

KEYWORDS: Bell's Palsy; Electromyography; Electroneurography; Prognosis

Antiviral therapy: oral famciclovir (750 mg/d) for 7 days.
Steroid treatment: Methylprednisolone for 10 days, 64 mg/d x 4 days, 48 mg/d x 2 days, 32 mg/d x 2 days, 16 mg/d x 2 days.

Acyclovir improves recovery rate of facial nerve palsy in Ramsay Hunt syndrome

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Abstract

Objective: Although the antiviral agent, acyclovir, is currently employed for the treatment in Ramsay Hunt syndrome, the benefit of acyclovir on facial nerve is still unknown and remains controversial. This study was designed to evaluate the effect of acyclovir in facial nerve recovery in Ramsay Hunt syndrome. *Methods:* To evaluate drug effect on facial nerve function, evaluation of the facial voluntary movement and nerve excitability testing were performed. We have used an infusion therapy of acyclovir in combination with a high dose of steroid (AS), which was started within 7 days of onset of facial nerve palsy in 91 patients with Ramsay Hunt syndrome. The results were compared with those of 47 patients whose therapy was steroid alone started within 7 days of onset. *Results:* Out of 91 patients treated with AS, nerve exitability was good in 68 (75%), while it was poor in 17 and absent in six. Of 47 patients treated with steroid alone, nerve exitability was good in 25 (53%), while it was poor in 11 and absent in 11. There was statistically significant difference between AS and steroid therapy in the posttreatment degree of nerve function. Complete recovery to grade I in facial voluntary movement was attained in 82 of 91 patients (90%) in the AS therapy, while out of 47 patients treated with steroid alone complete recovery to grade I was attained in only 30 (64%). A statistically significant difference in the recovery rate of facial nerve function was induced between AS and steroid therapy. *Conclusion:* The AS therapy was proved to keep good degree of nerve function indicated with nerve excitability testing and improve recovery rate of facial nerve in Ramsay Hunt syndrome. Based on this study, we now believe that the AS therapy is an advisable treatment modality to improve the recovery rate of facial nerve function in Ramsay Hunt syndrome.

Our study: Acyclovir 4000 mg per day (oral 800 mg five times a day) for 7 days.
Lampee *et al.*: The **infused dosage** of acyclovir for VZV is generally **15 mg/kg per day**, a higher dosage is required for oral administration since only 15–25% of the ingested dose is absorbed from the gastrointestinal tract.
Murakami *et al.*: It was reported that **intravenous acyclovir at 750 mg per day** and **oral acyclovir at 4000 mg per day** were equally effective in VZV infection.

THANK YOU FOR YOUR ATTENTION