Trials

Clinica

ISAR-98

Clinical trials of Treatment of Meniere's Disease with ACV

SUMMARY

Despite a variety of proposed causes, the real etiology of Meniere's disease (MD) is still unkown. Since no effective treatment has been established yet, the patients with this disease usually suffer from the uncomfortable symptomes for a long period and repeated recurrences. On the other hand, the latend infection of HSV and VZV in trigeminal and facial nerves related to the diseases has been reported and, more recently, latent infection of these viruses in vestibulocochlear nerve has been strongly suggested. I hypothesized the cause of MD is the infection of HSV and/or VZV and administered Acyclovir(ACV) to the patients with MD and Meniere's syndrom, and reported the marked effectiveness of the treatment at the ninth ICAR. I have accumulated the cases and reconfirmed the results with confidence.

Between October 1990 and October 1997, 301 patients were given ACV with the dose of 2,000mg/day for the average period of two weeks. The effectiveness was shown in more than 80% of MD patients including effective and markedly effective.

From October 1990 to October 1997, I have treated 301 patients with MD administering ACV 2,000mg/day for the average period of two weeks. Out of these 301 cases who visited my clinic suffering from vertigo, ear tingling and impaired hearing, 10 were diagnosed at my clinic and the rest was diagnosed by otolaryngologists.

Fllowings are the two typical representative cases of the treatment of Meniere's disease with ACV.

In the fall of 1996, the patient noticed that the sound coming through earphone was split. In mid-January of 1997, her right ear tingling (the sound of wind blowing and wave) started. She was prescribed Ca-antagonist by a physician and her blood pressure was 180/130 mm Hg then. She had no symptom of dizziness at all. On February 3rd, she visited an otolaryngologist. She had loss of hearing in the right ear. Hearing was slightly low in the left ear. She was diagnosed as Meniere's disease. She took

left ear. She was diagnosed as Meniere's disease. She took isosorbide (diuretica) for 10 days but felt no change in her symptoms.

On February 13th, the patient visited my clinic for the first time. I prescribed 2,000mg/day of ACV and 6 days later the right ear tingling was much improved. After 2 weeks of ACV administration, tingling was gone and the music sounded about 80% better which used to sound like

it was played much too faster. Three months later on May 25th, a light tigling come back. I prescribed ACV again for

Shown below is her audiograms, (by otolaryngologist doctor Ueno)

Case 2 Physician Male 36 years old

7 days and tingling was gone 4 days later.

In 1987, the patient had an attack of dizziness with hearing loss repeatedly for about 6 months. He was diagnosed as Meniere's disease by an otolaryngologist. He did not have any attack after that until 1997. On May 27,1997, he suddenly had rotatory vertigo that lasten for 3 hours which went away after a rest. After that for 2 weeks he only had light dizziness, From June 14th, he had attacks with rotary vertigo for 3 to 4 hours every other day or so. The results of hearing test and CT, MRI were normal but nystagmus was found. An otolaryngologist diagnosed his illness as Meniere's disease (vestibular type). The patient started taking sodium bicarbonate, vitamin E, vitamin B12, and isosorbide, but showed no sign of recovery. He had attacks every other day making it difficult for him to see his patients.

He started taking ACV 2,000mg/day on July 2. After that the intervals between attacks became longer. From July 8, he started taking 4,000mg/day of ACV and that made the intervals more longer and attacks lighter. About 14 days after he started taking ACV, he still often had rotary vertigo which lasted for a several seconds but attacks lasted only about an hour. The attack on July 20th was the last one he noticed. He stopped taking ACV on July 22nd.

Discussion

1 About diagnosis

In this study, the author accepted the test results and diagnoses of specialists of otolaryngology, except 10 cases which he diagnosed according to the typical clinical symptoms of the patients.

2 About treatment

As for the treatment of MD using anti-viral remedy, there have been no reports except the author's previous two papers (in Japanese). Therefore, the dose and duration of administration of ACV had to be determined in accordance with the treatment against alpha-herpes subtype without any certain ground in treatment of MD.

3 About recurrences

39 out of 301 cases had recurrences. All of the patients with recurrent disease wanted to be treated with ACV. Treatment of recurrence with ACV was more effective than previous treatment.

4 Cause of Meniere's disease

The dramatic effects of the treatment with ACV for MD strongly suggested that MD is caused by the viral infection in vestibulocochlear nerve. Judging from the pharmacological effect of ACV, HSV and VZV are suggested as the causative agents.

Refrences (in human)

1 Williams, LL, et al: Arch Otolaryngol Head Neck Surg. 113:397, 1987

They observed increases in immunoantibody titers against HSV,VZV, measles and CMV in 25 cases with MD.

2 Furuta, Y, et al: Acta Otolaryngol (Stockh) Suppl. 503:85,1993

They detected HSV-1 in 6 out of 10 cases by PCR of vestibular ganglia of autopsy materials.

3 Shichinohe, M: Igaku no Ayumi (in Japanese) 169: 796,

He confirmed therapeutic effect on MD with ACV.

4 Shichinohe, M.; Shindan to Chiryo (in Japanese) 82:1860,1994

He observed therapeutic effect in 9 out of 10 cases on MD and Meniere's disorder with ACV.

- 5 Welling, D, E, et al: Am. J. Otolaryngol. 15: 639,1994
 They detected HSV-DNA in 2 out of 22 in endolymphatic sac from MD patients.
- 6 Kumagami, H,: Eur Arch Otorhinolaryngol 235: 264,1996

He showed that HSV antigen and DNA were observed in 9 out of 14 cases in the endolymphatic sac of autopsy materials.

7 Arnold, W, et al: Arch Otolaryngol Head Neck Surg. 123:53,1997

They showed the presence of a higher level of specific anti-HSV IgG in the perilymph of patients with MD.

Criteria of Effectiveness

Marked effect.

vertigo and ear tingling completely disappeared Effective:

vertigo disappeared, ear tingling and hearing improved Unclear effect:

vertigo improved, ear tingling and hearing not improved.

No effect:

vertigo, ear tingling and hearing not improved

Not evaluatable:

Follow-up study could not be done, since the patients did not contact doctors after administration of ACV.