

# Two Weeks Hyperbaric Oxygen Therapy for Sudden Deafness

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## <Objective>

The effectiveness of hyperbaric oxygen therapy (HBO) for sudden deafness (SD) has been controversial to date. We performed HBO for SD patients and examined the effects of different treatment regiments.

## <Materials and Methods>

Between January 2010 and November 2011, 87 patients with SD improved, but the other 202 patients with SD did not improved their hearing ability with drug therapy and HBO (2.0ATA60min).

The mean hearing abilities before and after starting HBO of these patients were measured and surveyed, retrospectively.

## <Results>

The mean hearing ability at one week and two weeks HBO were  $41.0 \pm 23.6$  dB, and  $27.2 \pm 16.0$  dB with significant statistical difference ( $p < 0.001$ ).

On the other hand, those at two and three weeks HBO were  $36.8 \pm 18.1$  dB, and  $29.1 \pm 15.1$  dB, respectively, with no observed statistical difference ( $p = 0.103$ ).

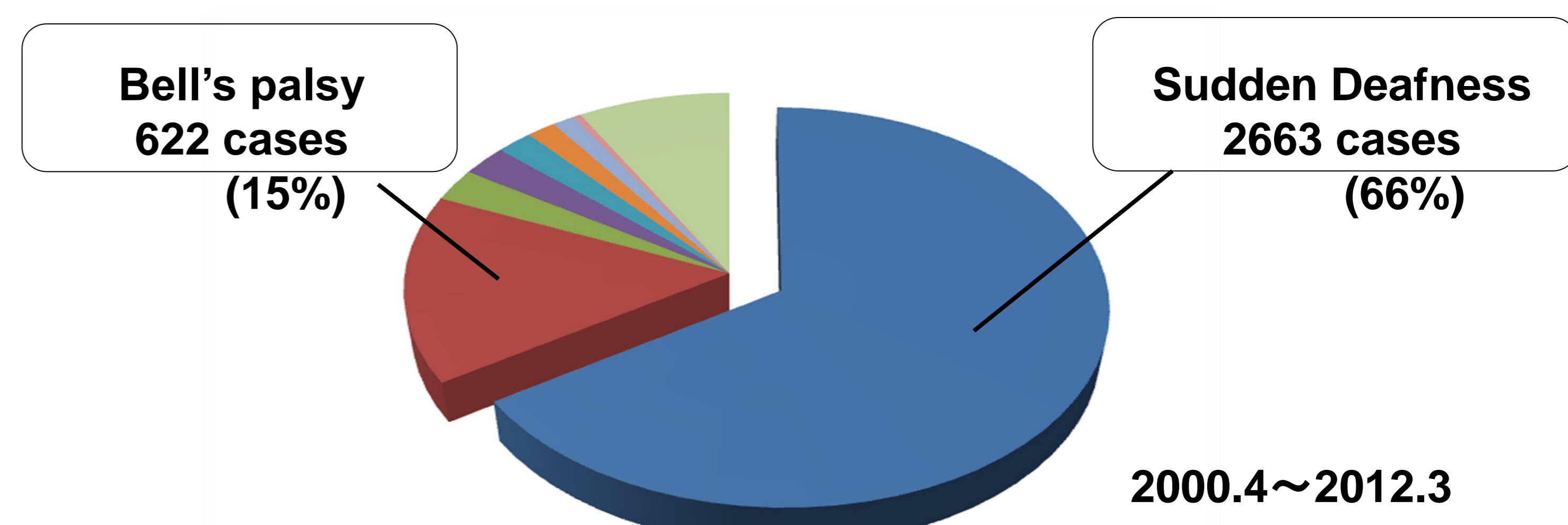
## <Conclusion>

From these data described above, two weeks HBO would be a recommended standard therapy for SD. An additional week of HBO may be an option of therapy for improvement of recovery state of hearing ability.

## HBO cases

Total: 4,033 cases

Total number conducted: 49,851



## HBO system



Seats



Entrance



Control center



Patients



Monitors

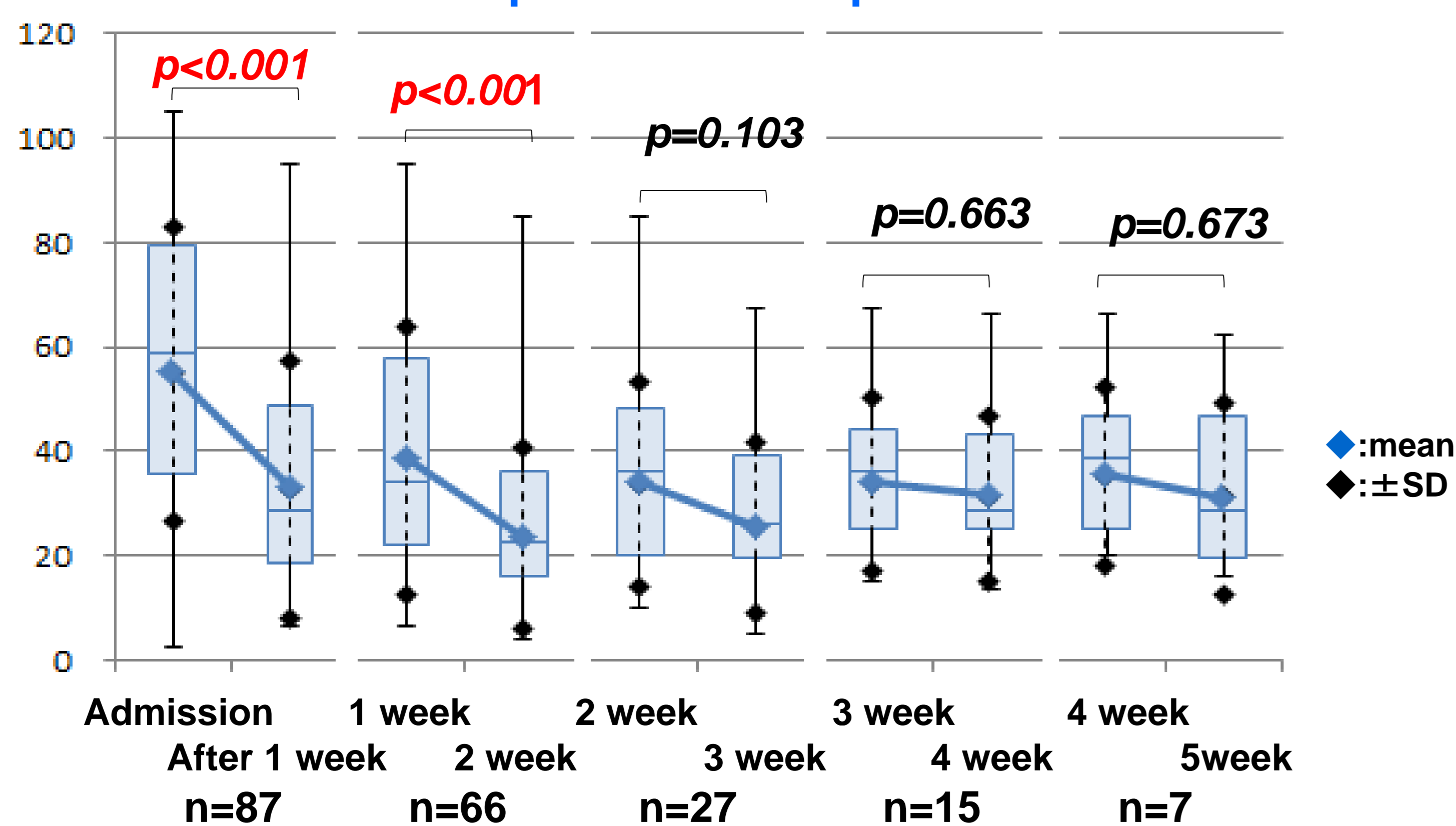


Infrastructures



Staff

## Follow-up Data of 87 improved cases



## Follow-up Data of 202 not-improved cases

