First-bite syndrome (FBS) is the development of pain in the parotid region after the first bite of each meal and can be seen after surgery of the parapharyngeal space or deep lobe of the parotid gland. The cause is not clear, but it has been proposed to involve loss of sympathetic nerve function to the parotid, causing a denervation supersensitivity of myoepithelial cells in the salivary gland. In addition, no effective medication has been proposed so far. In this study, we aimed to demonstrate the effectiveness of pregabalin, an anticonvulsant drug used for neuropathic pain, for the treatment of FBS.

Methods and Materials

Patients
We enrolled 11 consecutive cases who underwent surgery extending to the parapharyngeal space at the Okayama University Hospital between March 2010 and April 2012.

Study design
Controlled before-and-after trial

Medication
Administration of pregabalin (25 mg/day) on day 1 and gradual increase up to 150–300 mg/day.

Primary endpoint
Visual-Analogue Scale (VAS) for the pain of FBS

Results
Pain reduction was found in all 11 cases. The average VAS score was 66.0 before administration. After administration, the average VAS score was 13.0 (p < 0.001).

Discussion
At present, there is no consensus on the best treatment for FBS, even though the patients experience excruciating pain until the symptoms improve with time. All patients who took pregabalin showed immediate improvements after medication. The effectiveness of an anticonvulsant (carbamazepine) for FBS has been reported by Cernea et al. (2007) in a single case. To our knowledge, this is the first report to describe the effectiveness of pregabalin for the treatment of FBS.

Conclusions
We demonstrated that pregabalin had a significant effect on pain. Pregabalin may become the first-line drug for the treatment of FBS.