

# Long term follow up of patients who have undergone Vivaer intranasal remodelling to enlarge narrow nasal valves

D.Brehmer<sup>1</sup> B.Olzowy<sup>2</sup>

1. HNO-Gemeinschaftspraxis, Goettingen + University Witten / Herdecke 2. HNO-Zentrum, Landsberg am Lech,

## BACKGROUND

Weak and/or inward-bent cartilage of the nasal sidewall at the level of the internal nasal valve (INV) can produce stenosis and/or collapse of the nasal valve. This is a common cause of impaired nasal breathing and is often difficult to treat.

The Vivaer intranasal remodelling treatment is non-invasive and uses a stylus to deliver controlled and targeted radiofrequency heating to the nasal sidewall in order to gently reshape the tissues. It is an outpatient treatment administered under local anaesthesia.

In a previous study 20 patients underwent Vivaer treatment across 3 locations between October 2015 and February 2016 and the improvement in nasal breathing published in July

2016 (ref. 1). A NOSE score improvement of -41% was reported after 90 days (n=20).

This retrospective study investigates the duration of the effect of the Vivaer treatment on nasal breathing.

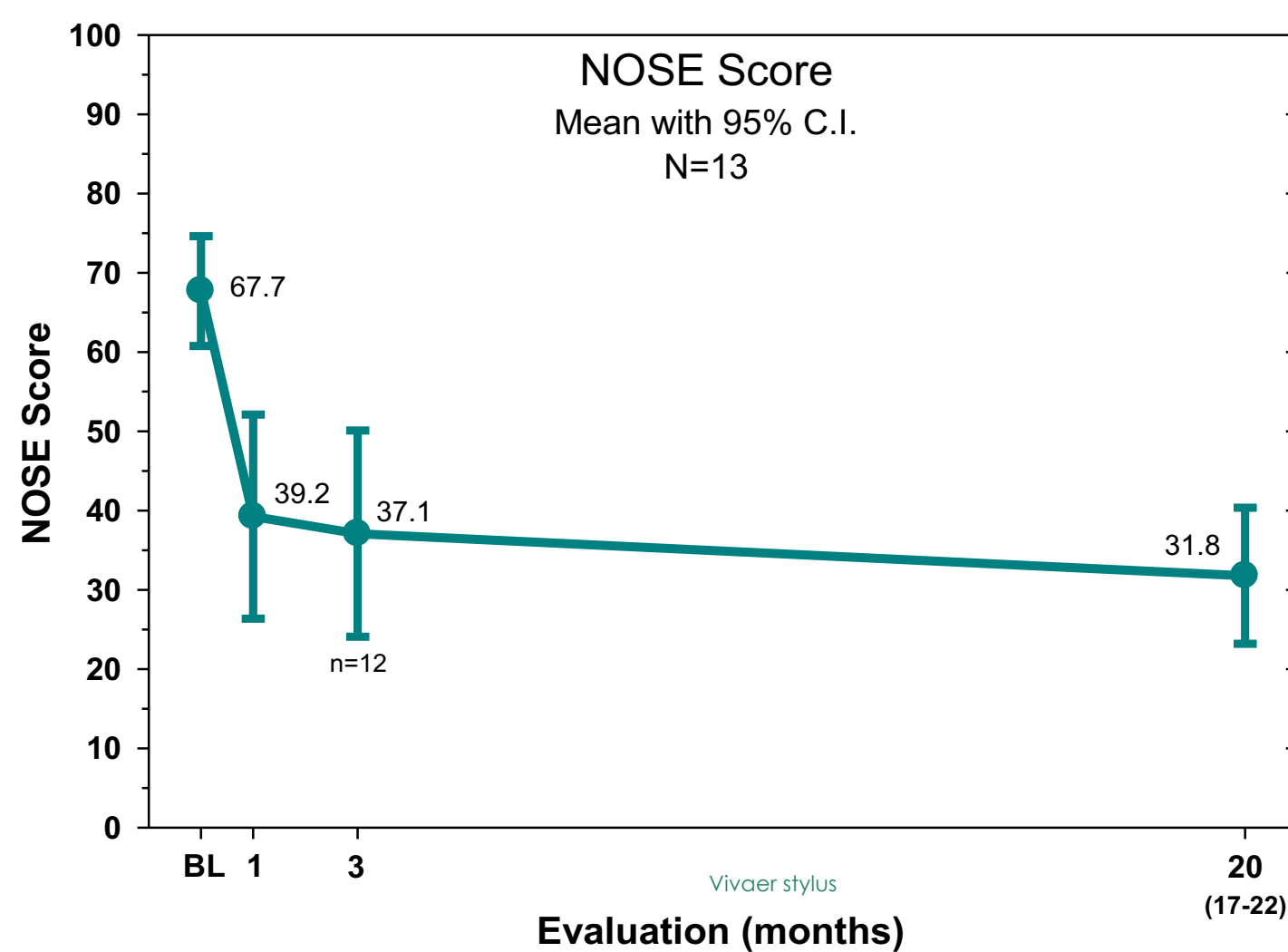
## METHOD

16 of the original 20 patients who had undergone Vivaer across 3 locations were contacted and asked to participate in the collection of follow up data. Of those contacted 13/16 were successfully followed up.

Follow up consisted of physical examination of the treatment site and the recording of a current NOSE score. Patients were also asked about their overall experience and their satisfaction with the treatment.

## RESULTS

- The average pre-treatment NOSE score of the n=13 patients was 67.7 (55-85, SD 11.0).
- The average long term improvement in NOSE score was -35.9 (-47%).
- On average patients improved by 1.5 severity classes vs baseline with a 91% (n=12/13) responder rate.
- The average difference between the NOSE scores at 30 days and at long term follow up was -7.4 points (SD 21.6).
- No serious adverse events were recorded at the time of treatment. Upon follow up there were no recorded incidents of scarring or abnormal healing.
- The average age of the Vivaer treatment at re-examination was 20 months
- 7 of the original n=20 were lost to follow up.



## DISCUSSION

Vivaer intranasal remodelling can provide a durable and well tolerated non-invasive treatment for patients who are experiencing congestion due to narrowness or collapse of the internal nasal valve.

An improvement of -35.9 NOSE score points compares favourably to results achieved using conventional surgical interventions (ref.2).

## DISCLOSURE

Research grant from Aerin Medical Inc

## REFERENCES

1. First clinical experience with Vivaer intranasal remodeling treatment to enlarge collapsing or narrow nasal valve areas. Olzowy, Morski, Hellstern, Brehmer, poster presentation ERS 2016
2. Rhee, J.S. et al JAMA Facial Plast Surg. 2014;16(3):219-225. doi:10.1001/jamafacial.2013.2473

