

# MICRODEBRIDADOR EN LA CIRUGIA CENS

XXX CONGRÈS SOCIETAT CATALANA DE OTORINOLARINGOLOGIA I  
PATOLOGIA CERVICO FACIAL

Dr Enric Cisa  
Servei ORL H Universitari de Bellvitge

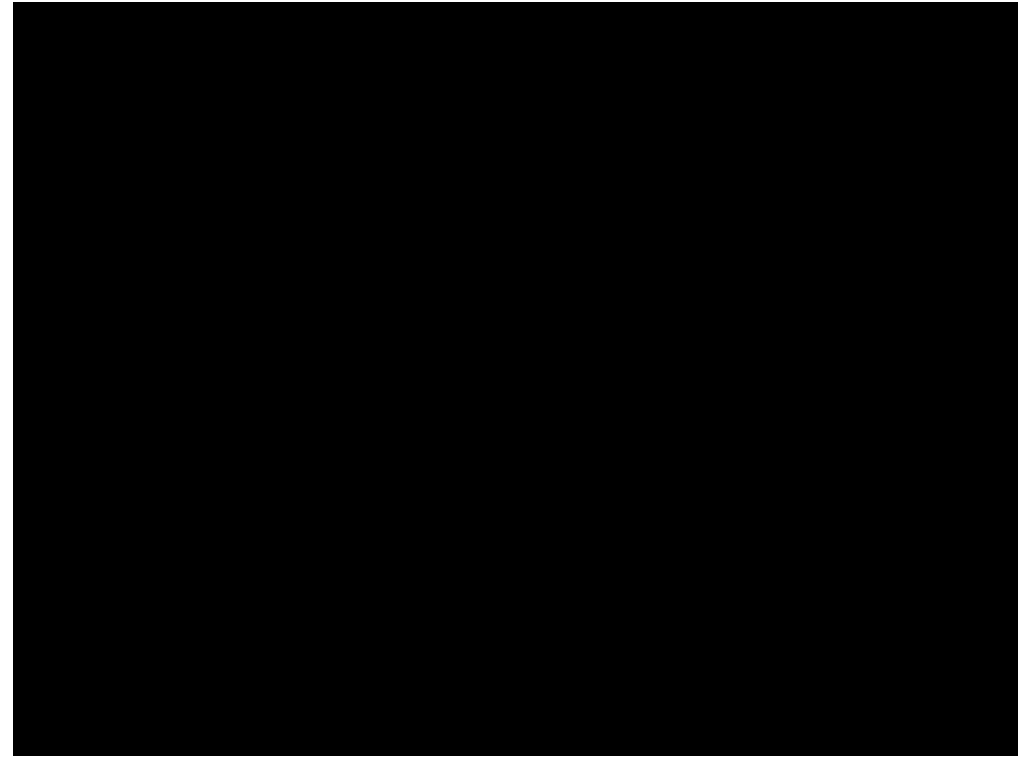
# CENS CON MICRODEBRIDADOR

- Complemento a la cirugía endoscópica de unos 20 años de evolución
- Consta de Consola
  - Pieza de mano
  - Pedal multifunción
  - Bomba de irrigación
  - Terminales de pieza mano con función cuchilla y fresado en diferentes angulaciones

# CENS MICRODEBRIDADOR



# CENS MICRODEBRIDADOR



# QUE PODEMOS REALIZAR CON EL MD

## – PATOLOGIA INFLAMATORIA

- ELIMINAR POLIPOS NASALES

- UNCIFORMECTOMIA

- APERTURA DEL SENOS MAXILAR

- APERTURA Y NASALIZACION CELDAS ETMOIDALES

- ESFENOIDECTOMIA

## – PATOLOGIA TUMORAL

- ELIMINAR TEJIDO TUMORAL QUE OCUPA LA FOSA NASAL E IDENTIFICAR IMPLANTACION TUMORAL

## Conventional versus Microdebrider Assisted Endoscopic Sinus Surgery for Sinonasal Polyposis - A Comparative Study

N. Kanishka Varman, Borligegowda Viswanatha\*, Mohammed Hussain S.,  
Maliyappanahalli Siddappa Vijayashree, Shambulinga Killera

Otorhinolaryngology Department, Bangalore Medical College & Research Institute, Bangalore, India

**Abstract** **BACKGROUND:** Sinonasal polyposis is frequently encountered in rhinology practice and has a significant effect on the quality of life. Functional Endoscopic Sinus Surgery with conventional instruments or powered tools is the modality of choice. The objective of our study was to compare the efficacy of microdebrider assisted endoscopic sinus surgery versus conventional instruments and to assess the intraoperative and postoperative outcomes in both methods. **METHODS:** A prospective study was conducted on 50 patients with bilateral sinonasal polyposis of which 25 patients underwent conventional polypectomy and the rest 25 patients underwent microdebrider assisted endoscopic polypectomy. The study aimed at comparing the intraoperative (blood loss, duration of surgery) and post operative results (postoperative pain, symptoms, scarring, synechia formation, polyp recurrence) and the data was statistically analysed. **RESULTS:** Paired t test was used for statistical analysis of the data obtained. The intraoperative mean blood loss and duration of surgery were significantly higher in the conventional group (p-value <0.001) as compared to microdebrider group. Postoperative pain in both groups were compared and was significantly higher in the conventional group (p-value<0.001). Scarring, synechia formation and recurrence of polyps were significantly higher in the conventional group in our follow up period of 6 months, however results were not statistically significant. **CONCLUSION:** Microdebrider assisted polypectomy is precise, relatively bloodless surgery, with cutting and suction in a single tool making the duration of surgery shorter with minimal trauma and thus offers better intraoperative and postoperative outcomes and better therapeutic results in comparison to endoscopic sinus surgery using conventional instruments.

**Keywords** Sinonasal polyposis, Conventional instruments, Functional endoscopic sinus surgery, Microdebrider

### 1. Introduction

Sinonasal polyps are edematous prolapsed mucosa of the nose and paranasal sinuses affecting about 4% of general population. [1] The prevalence rate of nasal polyposis in the general population is considered to be around 4% and it increases with age, reaching a peak in individuals aged 50yrs and above with a male: female ratio of 2:1. Sinonasal polyposis has a significant effect on the quality of life. [2] Although it is easy to diagnose this condition, it is yet a challenge for otorhinolaryngologists, because of its poorly understood etiopathogenesis, poor impact of therapeutic intervention and frequent recurrences. As it has a high tendency to recur and is associated with the risk of systemic side effects with the use of steroids, surgical management seems to be a far more favorable option. Thus microdebrider

assisted endoscopic sinus surgery offers better therapeutic results in comparison to endoscopic sinus surgery with the conventional instruments. [3, 4]

The principle of this technique is to remove the pathologic tissue from the ostiomeatal complex and to restore the corrupted mucociliary clearance and improve sinus ventilation without harming normal nasal physiology and anatomy. This method provides satisfactory results by making dissection faster, almost bloodless and safe, and allows rapid healing of tissues without causing much harm to the normal mucosa. Thus the aim of the study is to evaluate the efficiency of microdebrider in endoscopic sinus surgery versus conventional instruments and to compare intraoperative and postoperative results in both the methods.

### 2. Materials and Methods

A prospective study was conducted on 50 patients with bilateral sinonasal polyposis in the Department of Otorhinolaryngology, Bangalore Medical College and

\* Corresponding author:  
dirviswanatha@yahoo.co.in (Borligegowda Viswanatha)  
Published online at <http://journal.sagepub.org/otolaryn>  
Copyright © 2017 Scientific & Academic Publishing. All Rights Reserved

## Artículo Original

# Aporte del microdebridador en el tratamiento quirúrgico de la poliposis naso-sinusal(\*)

## Contribution of microdebrider in the sinonasal polyposis surgical treatment

Carlos Mena Canata<sup>(1)</sup>,  
Laurent Gilain<sup>(2)</sup>

### RESUMEN

La poliposis naso-sinusal es una patología inflamatoria de la mucosa respiratoria, donde una de las características es la riqueza en polimucleares y las formaciones poliposas. Tiene como síntomas, obstrucción nasal, rinorrea, anosmia, cefalea, prurito y estornudos. El tratamiento se basa en la corticoterapia local; o general en casos muy invalidantes. El tratamiento quirúrgico está indicado en pacientes que presentan cortico-resistencia, cortico-dependencia o cortico-intolerancia.

El objetivo de este estudio fue comparar tres técnicas quirúrgicas, la Etmoidectomía Radical, la Etmoidectomía radical con microdebridador y la Etmoidectomía Funcional con microdebridador, para lo cual se utilizó el microdebridador de tipo SHEAVER modelo XPS 2000.

La técnica denominada Funcional, fue en resúmenes cuentas la que presentó menor morbilidad, menor tasa de complicaciones, menor tiempo de intervención y hospitalización, pero estas diferencias con las otras técnicas resultaron no significativas sobre el plano estadístico. Los resultados a 12 meses del postoperatorio son comparables entre las tres técnicas, no habiendo diferencias significativas.

### SUMMARY

The sinonasal polyp is an inflammatory disease of the respiratory mucosa, characterized by the high polymuclear and the presence of polyps. There are several symptoms due to this condition: persistent nasal obstruction, rhinorrhoea, lost of smell, headache, pruritus and sneezing. The treatment is based on the use of intranasal local steroids, or systemic in other cases. The surgical treatment is prescribed in those who develop resistance, intolerance or dependency of the steroid therapy.

The object of the present study is to compare 3 surgical techniques, the classical radical ethmoidectomy, the radical ethmoidectomy microdebrider aided, and the functional ethmoidectomy with microdebrider, were the microdebrider was used.

The so called functional technique shows less morbidity and complication rates, as well as hospitalization and admittance days, but there are no significant differences between the other techniques. The

<sup>1)</sup> Monografía realizada en el Servicio de ORL del Hospital Gabriel Montpied, Clermont-Ferrand, Francia.

<sup>1)</sup> Medico Agregado. Cátedra de Otorrinolaringología. Hospital de Clínicas. FCM - UNA

<sup>2)</sup> Jefe de Servicio de Otorrinolaringología y Cirugía Cervicofacial. Hospital Gabriel Montpied. Universidad de Auvernia. Clermont CEDEX 1. Francia.

- Permite realizar cirugía funcional con resultados endoscópicos a 12 meses comparables
- La ausencia de desgarros mucosos junto aspiración e irrigación mejora la visión operatoria
- Leves diferencias en el sangrado operatorio
- Leves diferencias en la aparición de sinequias
- Hay una pérdida de la sensación táctil del cirujano respecto a la instrumentación con pinzas







