The Burning Mouth Syndrome (BMS) (synonyms are scalded mouth syndrome, burning tongue syndrome, burning lips syndrome, stomatodynia and glossodynia) is an idiopathic uncommon benign oral painful syndrome with several different patterns and with unknown causes. Patients complain for ongoing or recurrent of mouth and tongue burning pain, oral dysesthesia but normal is physical examination, therefore diagnosis is of exclusion. Women are seven times affected than men, increasing prevalence with advancing age, especially after 55 yrs. Drugs for BMS include clonazepam, amitriptyline, nortriptyline, doxepin, gabapentin and pregabalin, others such as alpha lipoic acid may be useful as well as topical capsaicin. A non-pharmacologic approach to management can be useful like laser therapy, stress management reduction, meditation, yoga, exercise, psychotherapy and cognitive behavioral therapy. Somatic (lingual nerve block) and sympathetic (stellate ganglion blockade) nerve blocks are a therapeutic choice for facial pain. We have combined sphenopalatine, maxillary and mandibular pulsed radiofrequency (PRF) treatments in two women with BMS resistant treatments.

Two women (53 and 61 yrs) affected for more than 2,5-4 years of BMS resistant to many therapies and with positive tests to sphenopalatine and somatic blocks (at least 50% pain relief to lidocaine 1-2% test) were enrolled to realize PRF treatments under fluoroscopy guidance after detailed exposures. The first patient received sphenopalatine and maxillary PRF treatment and the second sphenopalatine and mandibular PRF combined treatment based on prevalent painful oral region. Repeated treatments were performed after 4 weeks from ineffective first treatment and patients were evaluated for pain reduction with a Numerical Rating Scale for oral discomfort and improvement in daily life activities as also sleep dysfunction.

PRF is used to achieve pain relief for a longer time than that obtained with an anesthetic block and to obtain a lesser adverse outcome on peripheral nerves where a high incidence of neuritis might otherwise be anticipated using conventional radiofrequency. PRF sphenopalatine treatment is realized with an infrazygomatic approach to the ganglion under fluoroscopic guidance, in supine position, under iv sedation, tilting C-arm until the pterygoplatine fossa is visualized as an “inverted vase”. A 10 cm needle with a 5-mm active tip was then advanced always under fluoroscopic control toward the pterygoplatine fossa until to be adjacent to the lateral nasal mucosa at the superior-medial angle of the maxillary sinus target. PRF lesioning was then performed at 42° C for 120 seconds for two cycles. After a maxillary or a mandibular PRF treatment was added with a coronoid approach.

All procedures were completed with poor satisfaction for patients regard to results of treatment. NRS scores were not reduced significantly at 1, 2 and 3 months and the PRF treatments were not repeated at third once.

BMS with hidden underlying pathology is a serious therapeutic challenge for clinicians. Neurological blocks if positive for analgesic efficacy not always have a predictive value for effective PRF treatments. BMS and multiple failed therapies are the rule rather than the exception and perhaps the reason for a nocebo effect.

References.