

# Inability to Burp Syndrome-Retrograde Cricopharyngeal Dysfunction RCPD- by Yakubu Karagama, UK Ear Nose & Throat Surgeon.

[www.karagama-ent-clinic.co.uk](http://www.karagama-ent-clinic.co.uk)

## Cricopharyngeal Muscle Dysfunction: Symptoms, Diagnosis, and Treatment

Cricopharyngeal (CP) muscle (Fig 1) dysfunction is a condition characterized by the inability to burp, resulting in a range of distressing symptoms. Typical manifestations of this disorder include abdominal bloating due to gas trapped in the stomach (Fig. 2), audible gurgling noises in the throat, excessive flatulence, troublesome hiccups, and an intolerance to carbonated beverages (Karagama 2021, Bastian et al 2019).

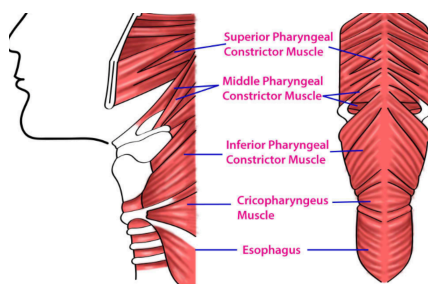


Fig. 1. Cricopharyngeal Muscle



Fig 2. Barium Swallow illustrating gas trapped in the stomach resulting in the bloating discomfort experienced by people suffering from RCPD

**Age and Presentation:** This condition affects individuals of all age groups. Unfortunately, many patients present with delayed diagnosis, despite enduring these symptoms for several years. This delay often arises from a lack of recognition that these symptoms stem from the inability to burp. Consequently, patients frequently undergo multiple gastroenterological investigations and may receive misdiagnoses, such as Irritable Bowel Syndrome (IBS), reflux, or Small Intestinal Bacterial Overgrowth (SIBO).

**Gender Equality:** Both males and females are equally susceptible to this condition, with no gender-based predilection reported in the literature.

**Diagnosis:** Diagnosis typically involves a comprehensive evaluation of medical history and physical examination. In certain cases, nasal endoscopy may be employed to rule out other throat-related conditions (Karagama 2021, Bastian et al 2019).

**Treatment Options:** The primary treatment approach involves the injection of a high dose of Botulinum Toxin A (Botox) into the cricopharyngeal muscle (Fig. 3). This procedure can be performed either under general anesthesia (Fig. 4) (Karagama 2021, Bastian et al 2019) in an operating room or in a clinic setting by injecting botulinum toxin through the skin of the neck (Fig. 5) utilizing electromyography (EMG) (Fig 6.) for precise localization of the CP muscle (Wajsberg et). Each method has its unique advantages and disadvantages. Administration of Botox under general anesthesia offers the benefit of precise targeting of the CP muscle; however, it is associated with higher costs and a procedure duration of up to 30 minutes. Conversely, Botox injection guided by EMG in a clinic setting is a faster and more cost-effective alternative; however, it may offer slightly less precision compared to injections under general anaesthesia, where the CP muscle can be visualized more clearly and precisely targeted.



Fig. 3. Botox injection 100 iu with an injection needle

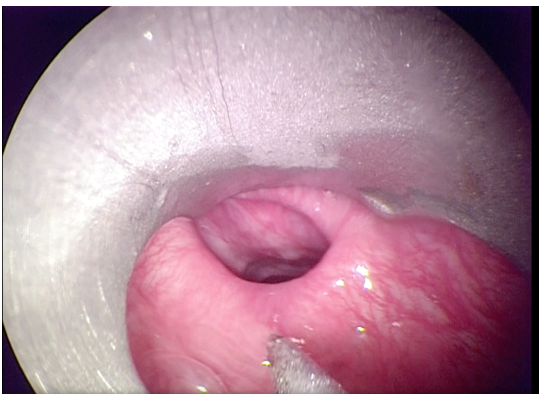


Fig. 4. Botox injection into the Cricopharyngeal Muscle under a General Anaesthetic in an operating room.

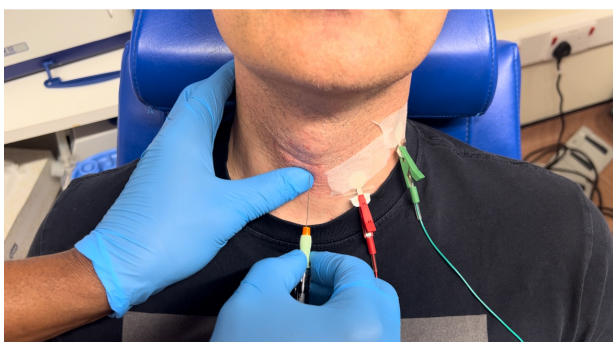


Fig. 5. Botox injection through the skin of the neck in the clinic guided by Electromyography.

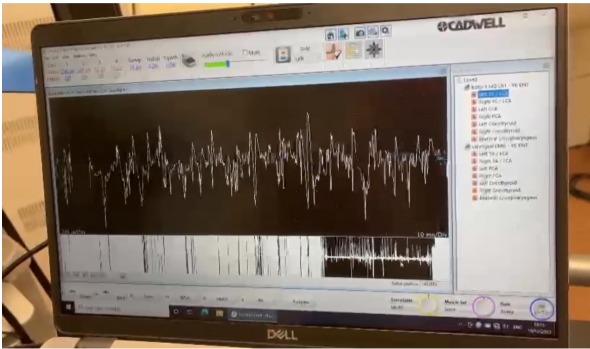


Fig. 6. Electromyography (EMG)

**Complications:** Complications arising from the treatment of this condition are typically mild and temporary. They may encompass transient difficulty swallowing solid foods, minor regurgitation episodes, and occasional wheezing. Fortunately, these complications tend to resolve spontaneously within a few weeks (Karagama 2021, Bastian et al 2019)

*References:*

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