

Manual carotid compression as a treatment option for carotid cavernous fistula: A case series

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Aim: To evaluate the efficacy of manual carotid compression in the management of low flow carotid cavernous fistulas (CCF).

Materials & Methods: Medical records of 22 patients diagnosed with low flow CCF and treated with manual carotid massage over the last 15 years were retrospectively analysed. Data analysed included demographic details, clinical features, associated systemic conditions, type of CCF and response to therapy. Outcomes were categorized as complete clinical resolution, partial resolution, and no resolution or worsening.

Results: A total of 22 patients were analysed, out of which 10(45.45%) were males and 12(54.55%) were females. The mean age was 60.04 years. Both eyes were equally involved. Three patients had a history of trauma prior to the onset of symptoms and 15 (68.1%) patients had associated diabetes, hypertension or both. The median time of presentation after the onset of symptoms was 5.5 months. The most common presenting features were episcleral congestion and proptosis (20; 90.91%), extraocular motility restriction (13; 59.09%) and chemosis (7; 31.82%). Most common CCF type was type D (16; 72.72%). All patients were advised manual carotid compression of which 5 patients were lost to further follow up. Of the remaining 17 patients, complete cure was seen in 2 (17.9%) patients, partial response in 10 (58.8%) patients and no response or worsening 5 (29.4%) patients. The mean duration of follow up was 14.5 months.

Conclusion: Carotid cavernous fistulas are abnormal communications between the cavernous sinus and carotid artery and its branches. Clinical features depend on the anatomy, hemodynamics and type of CCF. External manual carotid massage is a non-invasive, effective treatment and can be safely tried in patients with low flow CCF, with good results.