DEEP ORBITAL SUB-Q INJECTION FOR ENOPHTHALMIC SIGHTED EYES IN PARRY-ROMBERG SYNDROME

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PURPOSE: The authors present a consecutive series of Sub-Q deep orbital injections to treat enophthalmic sighted eyes in Parry-Romberg syndrome (PRS) patients. Orbital volume enhancement in sighted eyes arise a significant challenge and requires a safe and easily reversible method to minimize risk of sight loss or diplopia.

METHODS: The study was conducted as a consecutive, retrospective, interventional case series in 2 centers. Data was collected on patient demographics, PRS onset age, previous orbital and eyelid surgeries, diplopia, ocular movement restriction before and after the injection, number of injections, interval between injections and any ensuing complications. In all cases, the hyaluronic acid gel used was Restylane (SubQ + Lidocaine, Galderma, Sweden).

RESULTS: A total of three cases of PRS with significant enophthalmos were treated with deep orbital injections of Sub-Q. Patients were females, aged 32, 24 and 52 years old. Follow up period was 2, 7 and 5 years respectively. None had orbital intervention prior to the injection. Two patients had multiple lid surgeries. All presented a significant enophthalmos of 4 mm which reduced to 1 mm after the injection and duration effect was 18, 24 and 20 months respectively. Lagophthalmos improved from 1, 4 and 7 mm to 0, 1 and 2 mm post injection. Ocular motility improved with no new onset limitation or diplopia. No complications were recorded.

CONCLUSIONS: Deep orbital hyaluronic injection for the treatment of enophthalmos in PRS is a useful option for sighted eyes. It is a non-surgical outpatient treatment with the option of reversibility.