Orbital inflammation

60% of all patients with an orbital condition suffer from orbital inflammation. The inflammation is due to a response of the immune system caused by some sort of immunological trigger. There is a broad array of possible underlying causes ranging from autoimmune, systemic inflammatory, infectious, neoplastic and idiopathic origin. The most common cause is thyroid eye disease followed by idiopathic orbital inflammation, the latter of which remains a diagnosis of exclusion. Orbital inflammation can be the only or possibly the first manifestation of an autoimmune or systemic inflammatory disease. The clinical presentation is quite similar irrespective of the etiology, where signs and symptoms depend on which tissue(s) are involved in the orbit and to what extent. The inflammation can be located anteriorly in the eyelids and/or in the lacrimal gland (dacryoadenitis), in the extraocular muscles (myositis), spread in the orbital fat, and/or surrounding the optic nerve sheath (perineuritis). Typical presentations include pain, periorbital oedema, red eye, proptosis, limited eye movements, and blurred vision.

Patients with suspected orbital inflammation often require an extensive investigation, including detailed history, clinical examination, radiology, blood tests, and tissue biopsy. Unfortunately, these are seldom conclusive by themselves, but put together, a provisional diagnosis can often be posed. It is advocated that this should be done in a timely and effective manner so that possible targeted therapies can be given early to avoid orbital and systemic sequelae.