ment of glaucoma may also be examined from a different perspective. By working in a tertiary glaucoma reference centre, we occasionally examine patients who have been previously erroneously diagnosed with open-angle glaucoma. A retrospective assessment of these patients' charts from 2005 to 2008 has revealed that out of 108 referrals (41 males, 37.96%) for tertiary glaucoma management, 16 (14.81%) did not strictly meet the criteria for glaucoma diagnosis[3]. All 16 patients (7 males, 43.75%) had previously been diagnosed with glaucoma by qualified ophthalmologists and had been given anti-glaucomatous medications. Glaucoma diagnosis had been widely based on the detection of "elevated" intraocular pressure (IOP) readings in one or both eyes, in some cases about 30-35mmhg, as well as "suspicious" appearance of the optic disk (including occasionally borderline peri-papillary nerve thickness measurements). The usual lack of findings on the visual fields had been attributed to the common knowledge that the visual fields become altered later on, along the course of the disease. Interestingly, in most of these patients, corneal pachymetry as well as gonioscopy had been performed and had been taken into consideration by the referring ophthalmologist. We therefore believe that glaucoma over-diagnosis in these patients did not reflect in any unrecognised presence of ocular hypertension or attacks of angle closure. We believe that in many cases, an elevated IOP reading may be attributed to neuro-psychological effects, as previously described[4]. However, once a diagnosis of glaucoma has been made it may be challenging for subsequent examining doctors to question its validity and take responsibility for discontinuing medications. Hence, a vicious circle of re-examinations and concern begins and it is difficult to break.

The situation may be further complicated by the liberal use of antiglaucomatous medications which add a substantial economic burden to patients and health care systems. This can also cause significant ocular surface morbidity and can compromise the success of any medical or surgical anti-glaucomatous treatment that may actually be required in the future. We therefore believe that both ophthalmologists and primary care physicians, through an active collaboration, should be more aware of the perils of glaucoma over-diagnosis, as well as the risk of missing undiagnosed glaucoma cases.

Conflict of Interest: None to declare

References

1. Topouzis F, Wilson MR, Harris A, Anastasopoulos E, Yu F, Mavroudis L, et al. Prevalence of open-angle glaucoma in Greece: the Thessaloniki Eye Study. Am J Ophthalmol. 2007; 144: 511-519.
2. Burr JM, Mowatt G, Hernández R, Siddiqui MA, Cook J, Lourenco T, et al. The clinical effectiveness and cost-effectiveness of screening for open angle glaucoma: a systematic review and economic evaluation. Health Technol Assess. 2007; 11: 1-190.
3. Mansberger SL, Medeiros FA, Gordon M. Diagnostic tools for calculation of glaucoma risk. Surv Ophthalmol. 2008; 53: S11-16.
4. Brody S, Erb C, Veit R, Rau H. Intraocular pressure changes: the influence of psychological stress and the Valsalva maneuver. Biol Psychol. 1999; 51: 43-57.

Detorakis E [1], Symvoulakis E[2]

[1]Department of Ophthalmology, University Hospital of Heraklion, Crete, Greece
[2]Primary Care Unit, Clinic of Social and Family Medicine, Faculty of Medicine, University of Crete

Keywords: glaucoma, diagnosis, patients, health care services

Corresponding author:Emmanouil K Symvoulakis, e-mail: symvouman@yahoo.com

Myofibroblasts in mucoceles and chronic sialadenitis of minor salivary glands

Dear Editor,

We present our study aimed to detect myofibroblasts (MFs) in salivary mucoceles, and chronic sialadenitis (CS) of minor salivary glands (MSGs) for the better understanding of their pathogenesis and the processes involved in fibrosis, respectively.

Archival specimens of 20 cases of extravasation mucoceles of 10-12 month duration, 6 cases of mucous retention cysts with 1 week-6 months duration and adjacent MSGs (26 cases) together 5 normal lower labial MSgs were used as controls. Immunohistochemical analysis for α-smooth muscle actin (α-SMA) and desmin was performed using the streptavidin-biotin methodin conjuction with morphological analysis (spindle shaped and sometimes stellate) used for MFs identification.

Histologic examination of the adjacent to mucoceles MSGs showed that the degree of fibrosis was normal, low, moderate and severe in 9, 6, 6, and 5 cases, respectively. In 12 cases the adjacent to mucoceles excretory ducts were distended. MFs positive for α-SMA but not for desmin were detected.

In extravasation mucoceles, MFs were found only in one case (1/20) with duration 4 months. In this case, MFs were present in the wall of granulation tissue that was partially substituted by dense connective tissue (Fig.1A). These results indicate that MFs are not involved in pathogenesis of extravasation mucoceles.

MFs were not found in normal salivary glands and this finding agrees with the results for normal submandibular glands[1]. Small number of MFs was seen only in one case (1/5) of CS with severe degree of fibrosis but not in cases with normal (0/9), low (0/6) and moderate degree (0/5) of fibrosis (Fig.1B). These results concur with a previous study in CS of submandibular glands and support the suggestion that MFs are not significantly involved in the processes of fibrosis[1].

MFs were found around the lining epithelium of 2/6 cases of mucous retention cysts, and in 3/12 cases of the adjacent to mucoceles distended excretory ducts (Fig.1C). Myoepithelial cells give to salivary glands parenchyma sufficient support but are absent from the lining epithelium of excretory ducts. Therefore, our results possibly indicate a muscular supportive role of MFs around the cystic wall of mucous retention cysts and distended excretory ducts.

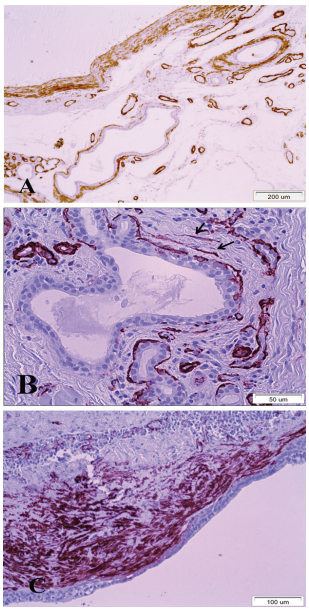

Figure 1: A. Extravasation mucocele where part of granulation tissue was substituted by dense connective tissue with large number of MFs. Also many MFs are presented around two distended excretory ducts adjacent to lesion. B. Small number of MFs around an excretory duct (arrows) in CS with severe degree of fibrosis. C. Large number of MFs is presented around the lining epithelium of mucous retention cyst (a-SMA Immunohistochemistry)

References

1. Harrison JD, Epivatianos A. Immunoprofile of Kuttner tumor (chronic sclerosing sialadenitis). Inter J Surg Pathol 2010; 18(5):444.

Epivatianos A[1], Iordanidis F[2], Andreadis D[1], Markopoulos A[1], Samara A[1]

[1]Department of Oral Medicine/Pathology, School of Dentistry, Aristotle University of Thessaloniki

[2]General Hospital "G. Papanikolaou", Thessaloniki, Greece.

Key words: Myofibroblasts, mucoceles, chronic sialadenitis, fibrosis

Corresponding author: Andreadis D, e-mail: dandrea@dent.auth.gr

Isolated sphenoiditis: presentation of 2 cases and review of the literature

Dear Editor,

Isolated Sphenoiditis (IS) is a relatively uncommon clinical entity (1-2,7% of all sinus infections). Due to important anatomic relations of the sphenoid sinus, the complications can be devastating. Predisposing factors for IS include forceful water entry into the nose during swimming or diving, allergic rhinitis, sinonasal polyps, bronchial asthma, septal deviation, middle/superior turbinate anomalies, radiotherapy, immunosuppression, diabetes mellitus and cocaine abuse. Among the pathogens that are involved in IS, the most common include *S.aureus, Streptococcus* species*, Peptostreptococcus, Fusobacterium, Klebsiella*, *P.aeruginosa*, *Aspergillus fumigatus* and *Aspergillus flavus*.

In our Department we have recently treated 2 patients with IS: a 45yo female and a 60yo female both complaining for severe occipital headache. Endoscopy revealed postnasal drip and purulent secretions from the left and right respectively sphenoid sinus ostium. CT scan showed complete opacification of the left sphenoid sinus in the first patient while a brain MRI (obtained earlier during a neurologic evaluation) revealed opacification of the right sphenoid sinus in the second patient. Initial conservative therapy (ceftriaxone 2g daily + clindamycin 600mg qid iv + xylomethazoline 0,1% nasal spray) was unsuccessful.

Patients were finally admitted to surgery. Sphenoidotomy through endoscopic transnasal approach was performed. The postoperative period was uneventful and both patients were dismissed 48 hours after surgery. Patients remain free of symptoms and the new sinus ostiums remain widely open.

The most common symptom on presentation is headache (50-60%)[1,2] with no characteristic pattern of distribution[3]. Patients may also experience ophthalmic involvement with VI or III cranial nerve paresis (diplopia in 40%) and blurred vision[1]. Classic symptoms of rhinosinusitis may also be present. Extension of the pathology causes orbital as well as intracranial complications.

Nasal endoscopy is useful for diagnosis. However, up to 60% of cases may have a normal endoscopic examination. Consequently, CT scan is the only modality that can consistently detect IS. The role of MRI is complementary. Initial management of IS is conservative (amoxicillin-clavulanic acid, and cephalosporins are typical choices). Response to conservative therapy, however, is often poor.

Surgical techniques developed in recent years include endoscopic transnasal approach, endoscopic trans-septal and endoscopic transpterygoid approach. The last two approaches are used for wide surgical exposure, in cases of suspected neoplasms.

The endoscopic transnasal approach is usually preferred. It can be performed with two approaches: (1) through the middle meatus following complete ethmoidectomy and (2) direct approach above the choane. The transnasal technique using a direct approach is safest[3]. As an alternative to the use of an endoscope, successful use of a surgical microscope has also been reported[4]. Regardless of the selected surgical method, excellent control of the disease should be expected postoperatively.

References

1. Güvenç MG, Kaytaz A, Acar GU, Ada M: Current management of isolated sphenoiditis. Eur Arch Otorhinolaryngol 2009; 266: 987–992.
2. Nour YA, Al-Madani A, El-Daly A, Gaafar A. Isolated sphenoid sinus pathology: Spectrum of diagnostic and treatment modalities. Auris Nasus Larynx 2008; 35: 500-508.
3. Socher JA, Cassano M, Filheiro CA, Cassano P, Felippu A: Diagnosis and treatment of isolated sphenoid sinus disease: a review of 109 cases.