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Apraxia of Lid Opening,
the Missed Diagnosis

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Definition of Apraxia of Lid Opening:

Episodes of non-paralytic ptosis, in an otherwise normal lid.

Apraxia = No function

Apraxia of Lid Opening ALO

- **Apaxia accompanies 50% of cases of bleparospam**
- **Is responsible for most cases of what was believed to be BOTOX failure**

Pure apraxia without orbicularis spasm is very rare.

Case 1 Meig Syndrome = Orofacial Dystonia + Apraxia

Clinical picture is difficult to observe

Apraxia of Lid Opening, case 1 Meig Syndrome, 2003

Case 1 Meig syndrome

1 w post-botox : wonderful

- **Was believed to be BOTOX FAILURE X X X**

2 w post- botox: apraxia started to show again.

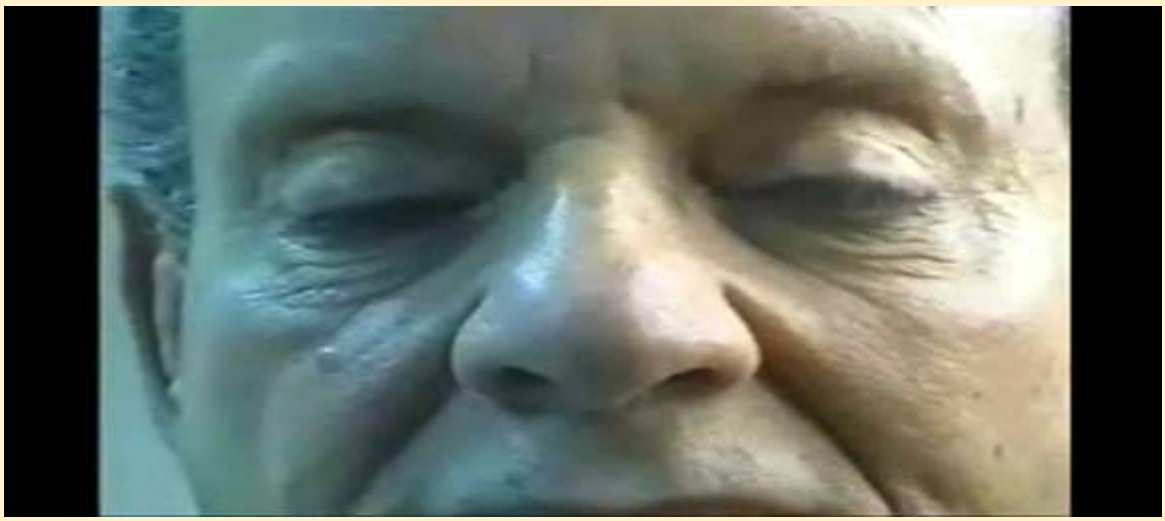
Its diagnosis was missed, being in 2003

Case 2:
Pure apraxia of lid opening

Very rare, no blepharospasm

This is the case who taught me what apraxia is!

Case 2: Pure apraxia without spasm +/- brow elevation



Big failure ☹

after un-needed botox and myectomy of orbicularis

Kept searching since 2003 on internet for a clue. Nothing!

At 2007 only 1 study by neurologists:

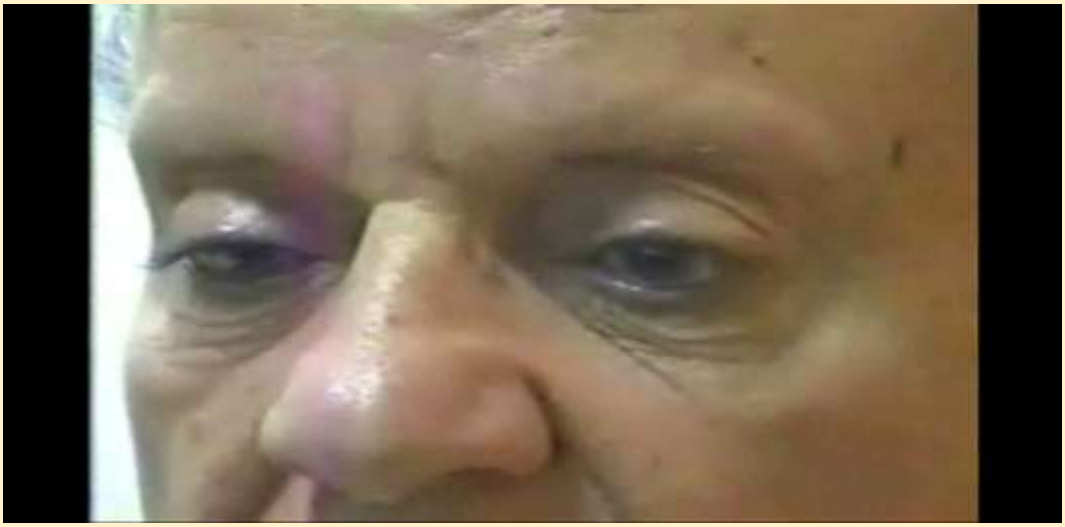
Apraxia, the new missed diagnosis

Mentioned same failure with botox and myectomy.

TTT

Open frontalis suspension

Postop: Open Frontalis Suspension



Case 3: blepharospasm + apraxia

after 7th n palsy, **Difficult to diagnose. After 2007**

Case 4:
Essential blepharospasm + apraxia

-Varying intensity of spasm

- Apraxia is easier to diagnose in this case

Case 4: Essential blepharospasm + apraxia

Varying intensity of spasm - easier to diagnose

Essential blepharospasm without apraxia, clear difference

Brief important info

Apraxia = Episodes of inability to open the lid, in an otherwise normal lid

Pathogenesis is poorly understood uptill now.

It is **involuntary inhibition of levator function** that may accompany: a stroke or brain degenerative disease or tumor.

Accompanies 50% of cases of blepharospasm

Dr Hatem A Tawfik presented an important study discussing true pathogenesis of the so called apraxia. His study discusses 3 possible hypotheses: apraxia, a freezing phenomenon or a dystonia. Many different alternative names were given to apaxia in other studies, denoting the lack of true definite explanation.

Botox acts as a therapeutic test to reveal apraxia without spasm

Apraxia = No function

Pure apraxia without orbicularis spasm is v rare.

It is responsible for most cases of what was believed to be BOTOX failure

→ Important info

Patients typically elevate their eyebrows in an attempt to open their lids until they open spontaneously.

-Increasing botox dose may induce ptosis and does not improve the result.

-Other causes of drooping must be excluded.

-To diagnose & ttt apraxia, all blepharospasm must be relieved first by botox and/or myectomy.

-After myectomy the dose or need for botox is decreased, effect and duration are increased.

ttt of apraxia is by open frontalis suspension surgery. It helps control the involuntary drooping.

NO effective medical ttt

BOTOX for
Neurophthalmic cases

is different than esthetic

Each injection has a **dose, location and direction**
to protect other muscles

50 U or 100 U vial kept in **freezer**,

once dissolved is kept in **fridge 2w**

100 U dissoved by 2.3 ml saline. NO **shaking.**

marking

On 100 U insulin syringe, from 0-10 = 5 unit. ie each 2 daches = 1 U botox

-brow depressors are injected: procerus, corrugator, orbiltal orbic.

-**Pretarsal** Orbic in **UL** &

preseptal in LL are injected only **med & lat.**

NO central injections

When works? for how long?

Esthetic cases need less doses in muscles creating creases.

Neurophthalmic botox addresses muscles in spasm with more units.

THANK YOU