Eponyms in Ophthalmology: What’s in a Name?

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What’s in a Name?

- How do ophthalmic diagnostic findings get their names?

What’s in a Name?

- Linnaean Taxonomy: system of classification

What’s in a Name?

- Linnaean Taxonomy
  - Binomial nomenclature

What About Human Anatomy?

- In the late nineteenth century some 50,000 terms for various body parts were in use.
- The same structures were described by different names, depending on the anatomist’s background: school, language, culture, traditions, etc.

Anatomic Terminology

- Nomina Anatomica was the international standard on human anatomic terminology from 1956 until it was replaced by Terminología Anatómica in 1998.
How About Ophthalmology?

Diagnostic Naming Conventions
- Etymology: origins of words often from Greek or Latin roots
- Named for anatomic location
- Descriptive of process or result
- Descriptive of appearance
- Acronyms or initials
- Eponyms: named for first person to identify or describe

Etymology
- Retinopathy from the Greek "Pathos": suffering, disease, feeling, passion.

Descriptive of Process or Result
- Macular degeneration
- Plaquenil toxicity

Descriptive of Process or Result
- Vitreo-macular traction
- Macular hole
Descriptive of Appearance

- Literal
  - Pink eye
  - Floppy lid syndrome

Descriptive of Appearance

- Synonymous (looks like something else)
  - Cherry red spot
  - Bear tracks

Cataract?

Ichthyosis

- Genetic skin disorder characterized by dry, scaly, or flaky skin that resembles the scales of a fish.

Acronyms: the other “nym”

- NPDR
- ARMD
- DUSN
- APMPPE
- MEWDS
- AZOOR

Acronyms: CHRPE

- Congenital Hypertrophy of the Retinal Pigment Epithelium
Acronyms: the other “nym”

- ICE Syndrome
- HELLP Syndrome
- FEVR
- PORN
- SCUBA
- ELVIS

ICE Syndrome

- Iridocorneal Endothelial Syndrome

FEVR

- Familial Exudative Vitreoretinopathy

Eponyms: Named for Me!

- Named for first person to identify or describe: Best’s Disease (Franz Best)

According to Wikipedia

- Eponyms are a longstanding tradition in Western science and medicine.
- At a time when medicine lacked tools to investigate underlying causes of many syndromes, the eponym was a convenient way to label a disease.
- To discuss something, it must have a name.

According to Wikipedia

- Being awarded an eponym is regarded as an honour:
  
  "Eponymity, not anonymity, is the standard."

  (Merton R K, 1973)
Eponyms: Named for Me!

- Anatomy
  - Bowman’s Membrane
  - Descemet’s Membrane
  - Canal of Schlemm
  - Annulus of Zinn
  - Schwalbe’s Line
  - Tenon’s capsule
  - Bruch’s Membrane

Eponyms: Named for Me!

- Diagnosis/clinical findings
  - Sjögren’s Syndrome
  - Eales Disease
  - Oguchi’s Disease
  - Behet’s Disease
  - Marfan Syndrome
  - Thygeson’s superficial punctate keratitis

Mittendorf Dot
Bergmeister Papilla

Other Eponyms

- Proper names of places:
  - Lyme Disease
  - North Carolina Macular Dystrophy
- Famous patients:
  - Lou Gehrig’s Disease (amyotrophic lateral sclerosis)
  - Tommy John surgery (named for first person to undergo the procedure).

Atypical Eponyms

- Legionnaire’s Disease
  - Acquired its name in July 1976, when an outbreak of pneumonia occurred among people attending a convention of the American Legion at a hotel in Philadelphia.
  - The causative agent was identified as a previously unknown strain of bacteria, subsequently named *Legionella*, and the species that caused the outbreak was named *Legionella pneumophila*
Atypical Eponyms

- Zamboni Disease
  - Tachycardia, tachypnea, frothy sputum and bilateral perihilar infiltrate seen on chest radiograph.
  - Occurs in ice skaters exposed to nitrogen oxides in fumes of ice-resurfacing machines.
  - Condition spontaneously resolves in 2–3 days.

Eponyms: Named for Me!

- Fuch’s Spot
  - Ernst Fuchs

Eponyms: Named for Me!

- Vogt-Koyanagi Harada

Eponyms: Named for Me!

- Wyburn-Mason Syndrome
  - aka Bonnet-Dechaume-Blanc Syndrome

Are Eponyms Bad?

- There has been sparring in the literature for years over the use of eponyms and the worthiness of some of the individuals that have conditions named for them.
Are Eponyms Bad?

- Eponyms are often controversial, especially when questions arise about the moral and ethical character of eponymous honorees.
- Egos are involved!

- In a 2010 editorial in *Retina*, Pulido and Matteson ask the question: “Is it worth having eponyms at all?”
  - “Although they can function as a memory aid, they do not enhance understanding of disease…”
  - “It is best henceforth to not name new diseases with eponyms and to start moving away from their use completely.”

Arguments FOR Eponyms

- The name may be shorter and more memorable than the medical one.
- Sometimes the medical name proves to be incorrect.
- The syndrome may have more than one cause, yet it remains useful to consider it as a whole.
- It continues to respect a person who may otherwise be forgotten.

Arguments AGAINST Eponyms

- Several eponyms may refer to the same disease.
- The same eponym may apply to different diseases, which creates confusion.
- A number of authors turned out to be Nazis (*Wegener’s Granulomatosis*) or conducted unethical medical research.

Arguments AGAINST Eponyms

- The name confers no information other than historical.
- There can be a Western bias to the choices.
- Different countries may have different eponyms for the same disease.
- History sometimes shows credit should have gone to a different person.

"For example, the dystrophy named Waardenburg and Jonkes was not a unique entity and was actually identical to the previously described Thiel-Benke dystrophy."  
Are Eponyms Bad?

"Furthermore, central cloudy dystrophy of François appears clinically indistinguishable from the degenerative condition, posterior crocodile shagreen."

Are Eponyms Bad?

- Stigler’s Law of Eponomy states, "No scientific discovery is named for the original discoverer."
- As proof, Stigler freely admits that others postulated the idea before he named it for himself.

Are Eponyms Bad?

- Malcolm Gladwell stated, "We think we’re pinning medals on heroes. In fact, we’re pinning tails on donkeys."

According to Wikipedia

- “The current trend is away from the use of eponymous disease names, towards a medical name that describes either the cause or primary signs.”

Genetic Names

- Move to name diseases by the gene mutation that cause them:
  - ABCA4 mutation results in Stargardt disease.
  - RPE65 Mutation results in Leber’s congenital amaurosis.

Not So Fast Wikipedia!
I Discovered it. Name it for Me!

According to Wikipedia

- "The scientific and medical communities regard it as bad form to attempt to eponymise oneself."
- I guess Dr. Dua didn't get the memo!

Eponyms are Here to Stay!

- Despite the egos and controversies involved, eponyms seem like they are here to stay.
- So let's take a look at some of the more interesting eponyms in ophthalmology.

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