Unlock the future
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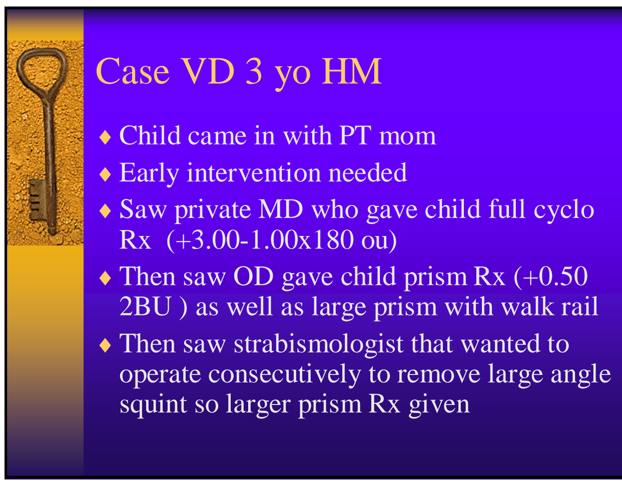
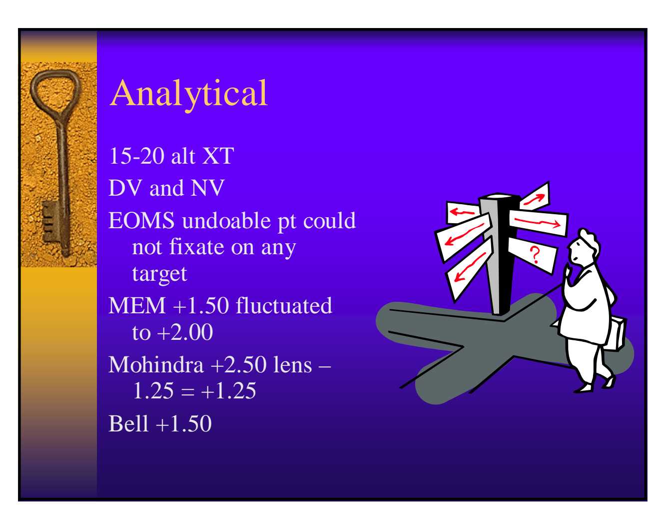
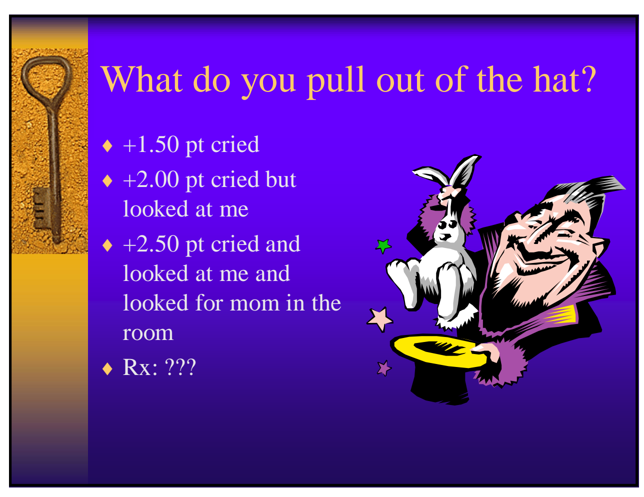
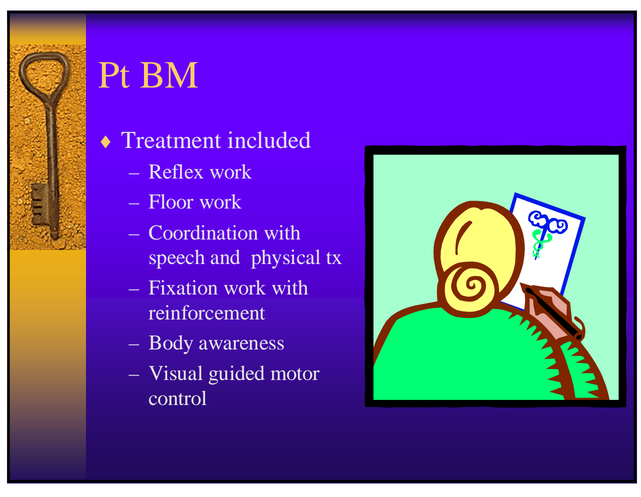
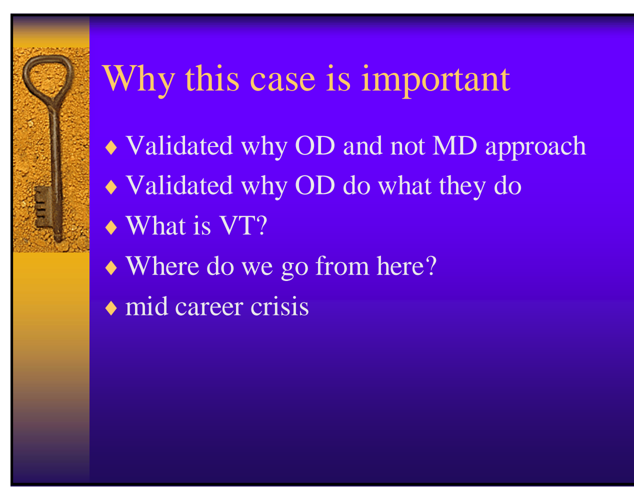
Look to the Future?
What is VT? The past?
Why are we doing this?
Why OD versus MD?
Help: Is there a mid career crisis?
Will VT exist as we know it?
Discussion with cases
VT Grammies

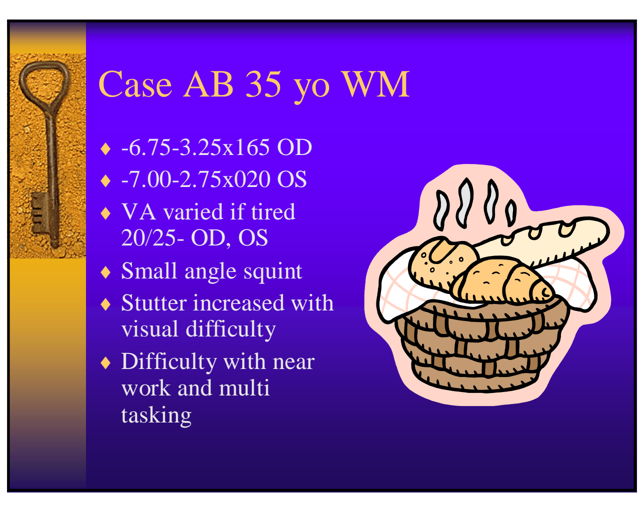

Case VD 3 yo HM
Child came in with PT mom
Early intervention needed
Saw private MD who gave child full cyclo Rx (+3.00-1.00x180 ou)
Then saw OD gave child prism Rx (+0.50 2BU) as well as large prism with walk rail
Then saw strabismologist that wanted to operate consecutively to remove large angle squint so larger prism Rx given

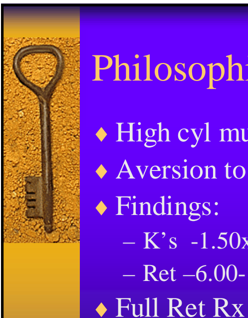

Analytical
15-20 alt XT
DV and NV
EOMS undoable pt could not fixate on any target
MEM +1.50 fluctuated to +2.00
Mohindra +2.50 lens – 1.25 = +1.25
Bell +1.50


What do you pull out of the hat?
+1.50 pt cried
+2.00 pt cried but looked at me
+2.50 pt cried and looked at me and looked for mom in the room
Rx: ???


Pt BM
Treatment included
– Reflex work
– Floor work
– Coordination with speech and physical tx
– Fixation work with reinforcement
– Body awareness
– Visual guided motor control


Why this case is important
Validated why OD and not MD approach
Validated why OD do what they do
What is VT?
Where do we go from here?
mid career crisis

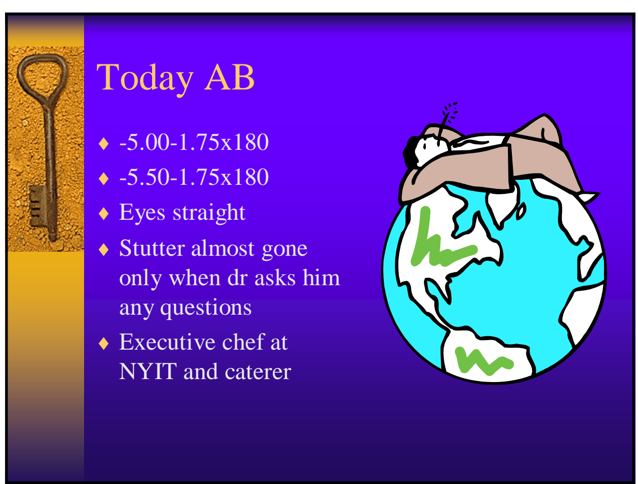

Case AB 35 yo WM
-6.75-3.25x165 OD
-7.00-2.75x020 OS
VA varied if tired 20/25- OD, OS
Small angle squint
Stutter increased with visual difficulty
Difficulty with near work and multi tasking



Philosophies

- High cyl must be confirmed with K
- Aversion to oblique axis
- Findings:
  - K's -1.50x170 OD –1.50x10 OS
  - Ret –6.00-1.75x 180 OU
- Full Ret Rx given with VT to decrease squint
- Pt broke down to CI at first reeval then continued VT with verbal incorp

Today AB



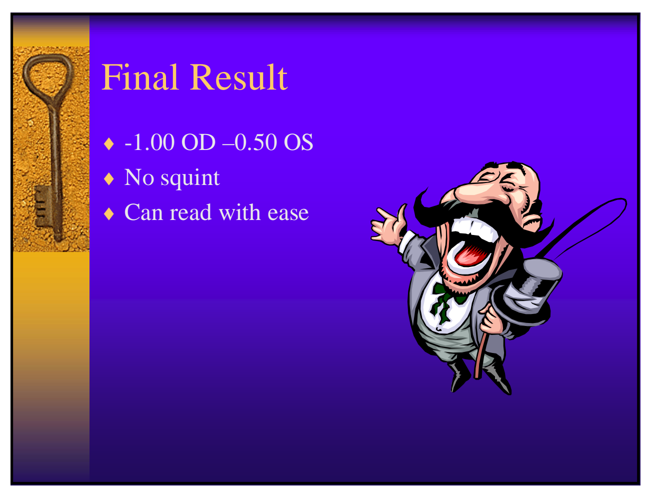
- -5.00-1.75x180
- -5.50-1.75x180
- Eyes straight
- Stutter almost gone only when dr asks him any questions
- Executive chef at NYIT and caterer

Case EZ 60 yo WM

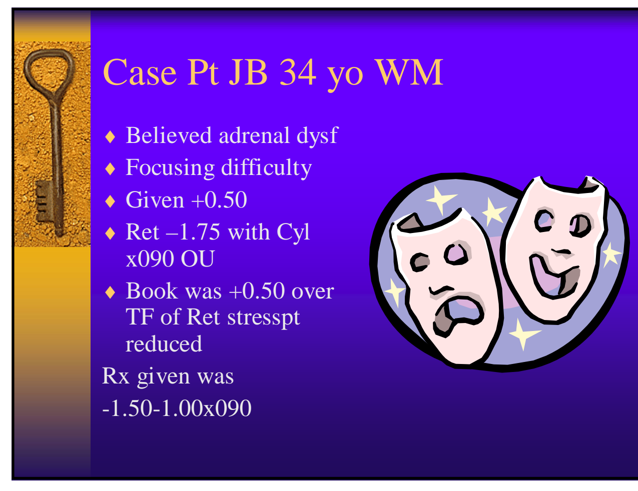
- Rx –1.75 sph OU
- Large angle squint 15-20 L XT
- Professor taking grad courses engineering background*
- Ret –1.25 OD –0.75 OS
- Subj –1.50 OU

Philosophies

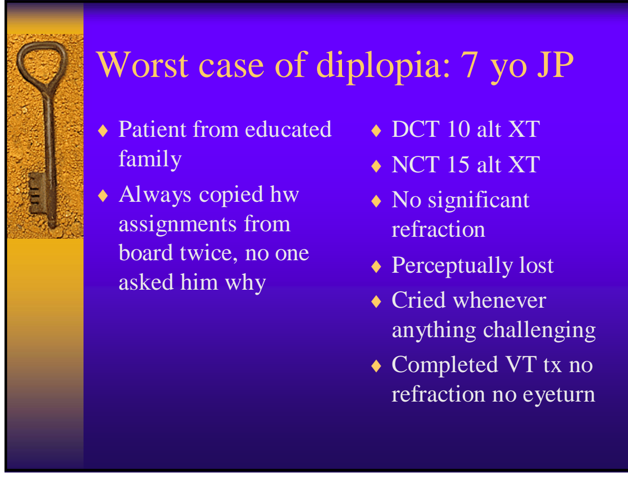
- If pt likes – go with it till you train it out of them! (esp. if has engineering bkgrd)
- Train out strabismus with mfbf and jd work
- Buy earplugs for all staff (older patients tend to be more talkative and symptomatic esp those with engineering bkgrd)
- If all else fails have pt come in more often to expedite tx process and symptomatic stage of decompensating squints



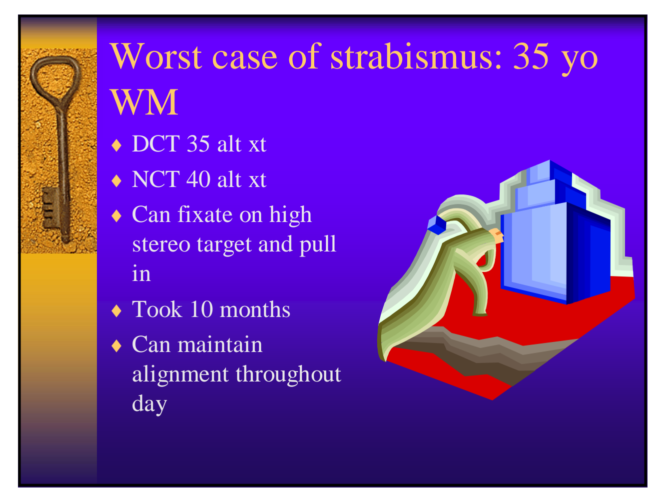
Final Result
-1.00 OD –0.50 OS
No squint
Can read with ease



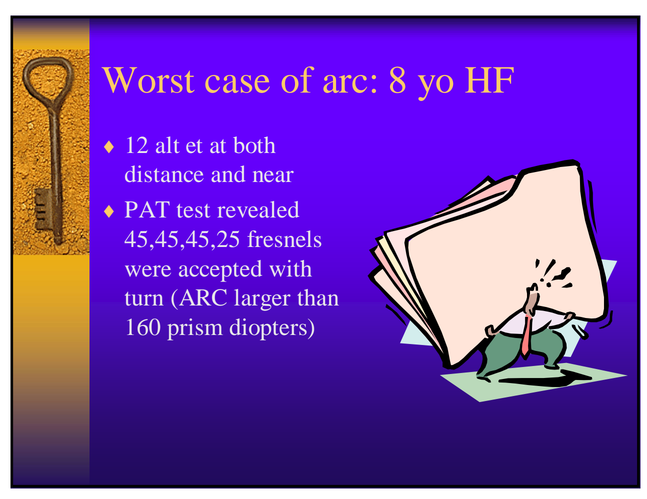
Case Pt JB 34 yo WM
Believed adrenal dysf
Focusing difficulty
Given +0.50
Ret –1.75 with Cyl x090 OU
Book was +0.50 over TF of Ret stresspt reduced
Rx given was
-1.50-1.00x090

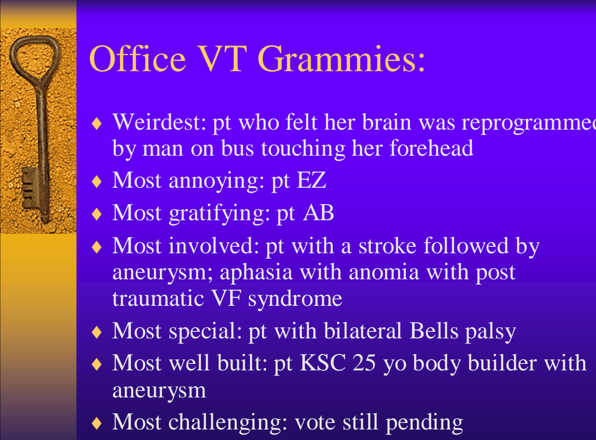


Worst case of diplopia: 7 yo JP
Patient from educated family
Always copied hw assignments from board twice, no one asked him why
DCT 10 alt XT
NCT 15 alt XT
No significant refraction
Perceptually lost
Cried whenever anything challenging
Completed VT tx no refraction no eyeturn



Worst case of strabismus: 35 yo WM
DCT 35 alt xt
NCT 40 alt xt
Can fixate on high stereo target and pull in
Took 10 months
Can maintain alignment throughout day





Philosophies

- Ignore people who annoy you and continue to practice as you know and not what is written up
- VT will survive the long run due to the fact that not everyone fits into a square hole
- Vision is global

Vision: old philosophies and new concepts; fact or fallacy?

- Not 20/20 issue: concept of refractive error tested in a dark room looking at mirrors
- Human eye not designed to see binocularly up close for extended amounts of time, e g tonic accom is 1m away
- Why reading distance of 40 cms allows for 3-6 exophoria with convergent plane and accommodative plane disparity
- Rethink the 20/20 issue of refraction in a dark room with optical infinity distorted
- Patient is viewing a virtual image portrayed through a mirror or a real image at 20 foot distance
- Every fighter pilot examined is slightly hyperopic with a 0.25 cyl

What is vision ?

- Neural
  - Innervation to muscle dependent
  - Reason why PAT test does not work
  - Anomalous correspondence
  - One eye approach HARC
  - Aphasia
- Motor
  - Strabismus
  - Refraction dependent
  - Muscle palsy
  - Muscle deficiency
  - Vergence work
  - Fixational involved

Visual Motor Hierarchy: leads to individualistic gestalt of vision

- Why do we have an individual view on things and each of us has some strengths and weaknesses; eg visual organization for packing, dynamic stereopsis for changing lanes while driving, …
- Why we all develop differently, is it a genetic or environmental output? Consider this: Stevie Wonder does he have a visual image of the world as he plots out the room. When we speak with someone on the phone can we "imagine" what he looks like, are we channeling into the same ability?

VT Future

- Since computers are constantly increasing and virtual reality and imagery is used we will always be needed in one form or another
- Q is how much more challenging will this get?
- What else will we see?
- Do we have to rethink our facts?
- Do we have to think more holistically? nutritionally?

Education if the public is the key

- If Obama can win the presidency by internet and blackberry texting everyone, what do we do?
- EDUCATE EDUCATE EDUCATE