Sports Vision Training

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Abstract:

- This will give the ECP a basic working knowledge in SVT evaluation and training techniques that he or she can apply immediately their next day in the office.
Learning Objective:

- ECP will have the ability to improve the athletes performance by making the athlete aware of his or her own visual system finding, give sports specific tips and coaching based on the individual’s visual findings, and prescribe vision training drills using lenses, prisms filters, etc. Eye protection will also be discussed.
Sports Vision Training

Model of Sports Vision

Training: Awareness, Tips, Drills

Be a Vision Coach
Awareness

How to test for and make athlete aware of his own visual system by testing for eye dominance, phorias, vergences, and accommodation
Awareness

- Eye Dominance- demo
- Phorias- phoropter, cover test, stable versus fluctuating
- Vergences- phoropter, flippers 12 BI/12 BO near 6 BI/12-15 BO dist. 12 cycles/ min
Awareness

- Accomodation - +/- 2.00 flippers. 12 cycles/ min, 14 b

- Worth 4 dot - red filter over dominant eye  Tony Fernandez

- Stereo testing - with and without shake
Awareness

- Brock String
- The Zone
Tips

Information for a same sided versus cross dominant athlete, what phorias predict, information on vergences, focal and ambient visual processing, and how to apply this information to golf, tennis, ball sports, shooting, etc. How to access The Zone.
Eye Dominance

- Dominant eye processes 14-21 milliseconds faster and use line of sight for localization.
- Baseball - open stance. Dominant eye on pitcher’s release zone. Doug Jennings
- Tennis - cross dom explained pro’s difficulties. Dom eye blocked by nose and he had high phoria
- Golf - position over putt, plumb bob with dominant eye
- Shooting - cross dominant failures qualifying on range, policeman’s story
Cover test and phoropter
- Eso- miss short PGA pros (14 of 15), ball sports- swing early
- Exo- miss long PGA pros (8 of 12), ball sports- swing late
- Unstable- Val Skinner and Patty Jordan
- Walk eyes along green to judge dist.
**Vergences**

Test in phoropter and flippers for jumps

- Base Out ranges
- Base In ranges
- Weak and/or out of balance
Accomodation

- McCouch story
- Anthony story
The Zone

- Focal/ Ambient Processing - Periph 25% faster and 20 % balancing (reduce squinting with lenses) and zone
- Peripheral Expansion
- “The Big Zen” story
- Body Alarm Reaction - opposite of zone, tunnel vision, law enforcement - Doug Jennings
- Vision is the dominant sense
Other Tips

- Factoring time into putting equation
- Spot putting and using your putter as an alignment tool
- Using logo on ball as alignment tool
- Pitch takes 4 tenths of a second to reach the plate. You have 2 tenths of a second to decide to swing.
- Make the target smaller
- Tape and mirror techniques to make sure eyes are directly over the line of the putt

- Reduce eye movements and use periphery - basketball, cycling, running, diving, tennis
- Keep your eyes on the ball and be aware of the periphery
SVT Procedures

How to improve strength, flexibility, stamina of the athletes visual system using lens flippers, prism flippers, and a vectogram. Information on The Zone and procedures to access it through the visual system.................

VISUAL SKILLS TRAINING
SVT Procedures

- Plus/Minus Flippers - trombone if can’t clear
- Prism Flippers
SVT Procedures

- Brock String

Left eye sees | Right eye sees
---|---
Eyes point here initially

Looking further than cross
Strings cross here
Need to relax eyes out (diverge)

Looking here on string
Strings cross further
Need to converge or tighten eyes (cross eyes more)

Tap here in this area

Diagram showing steps 1 to 7
SVT Procedures

- Bug Walk
SVT Procedures

- Vectograms
- Quoits - build ranges BI/ BO/BI......Qadry
- Spirangle - Zone trainier
SVT Procedures

- Peripheral expansion - batting bean bags tossed from side while walking on a balance beam to a metronome.
- Peripheral Expansion Chart
SVT Procedures

- Computer based training - HTS, Vizualedge, EyePerformance

- Sportsvision Magazine, SVS section of the AOA, Pro’s Edge
Eye Protection

Appropriate lens choices for the athlete. Eye protection. Fixed tint vs photochromics and polarized vs non polarized.
Eye Protection

- Like photochromics polarized or non-polarized. Varying lighting conditions
- Golf and ski - non pol
- Water sports - pol
- Cyclists Garmin Transitions team - Multiple sets of lenses replaced by one pair photochromics

- Aging athlete. By age 60 the pupil IS 20% smaller and you need 3x more light for specific tasks. Also light and dark adaptation takes longer.
Case Studies

- DJ - Batted 200 in US. After VT went to Japan. 17 hits out of 21 at bats, Tied consecutive home run record, MVP, billboards
- Qadry - on bubble with Ravens...record receptions and yardage, superbowl ring, ESPN announcer
- Three High School Kids - 118 pts increase in batting avg, HR ev 48 at batts - à HR ev 9.5 at batts. All drafted into the pros
Case Studies

- Patty Jordan - fluctuating phorias and low fusional ranges.
- Tony Fernandez - Low fusional ranges and central suppression. Batting average 278. Went to 321 the season after SVT. 2nd season after SVT led both leagues batting over 400 for first half of season.
Thank You!

- Questions?