The Breakdown

• Fitting complaints
• Vision Complaints

Nose Complaints

• Purpose is to bear weight
• Larger pads distribute weight over greater surface area
• Smaller pads concentrate weight over a smaller surface area

Pad placement affects comfort
– Too high causes pressure over nasal bones
– Too low squeezes nostrils limiting air flow
• The only remedy is widening or narrowing the nose pads
  – This may not be the best method to raise or lower the frame itself, but may be if the frame should also move in the direction of the nose pad movement
Temple complaints

- Shank of temples must not exert pressure on the sides of the head in front of the ears
- Touch on the side can cause slippage
- Skull temples (normal temples) are designed to exert pressure in the mastoid area
- Library temples (sport or ½ eye) are designed to exert pressure toward the back of the skull

Temple complaints

- Surface of temple that touches the head must rest flat
- To rest flat, we must look behind the ears and follow all the peaks and valleys of the mastoid
- Should not use the back of the ears to keep frame from slipping, but should follow the curve of the back of the ear

Balancing Complaints

- Two types of balance
  - Fitting triangle
  - Level

Balancing Complaints

- Fitting Triangle
  - Temple too wide
    - This side moves closer to face, pushing temple tip away from ear
    - This side of the nose hurts and opposite ear
Balance Complaints

• Fitting Triangle
  – Temple in too far toward head
    • This side moves away from face, pulling temple tip against back of ear
    • Opposite side of the nose hurts and this side’s ear

• Checking the fitting triangle balance
  – Using fingernail surface, lift under the forward temple shank and gently allow to rest on nose
  – Notice if frame pulls to right or left landing on one side of the nose
  – To tighten overall fit and correct balance, adjust the temple inward on the side that touches the nose first
  – To loosen overall fit and correct balance, adjust the temple outward on the side that touches the nose last

Balance Complaints

• Leveling the frame
  – First determine if additional pantoscopic or retroscopic tilt is needed
    • Use this information to determine which side you will adjust to yield level AND proper pantoscopic tilt

• To raise the right lens
  – Add pantoscopic tilt on right side (temple down)
  – Add retroscopic tilt on left side (temple up)

• To Lower right lens
  – Add retroscopic tilt on right side (temple up)
  – Add pantoscopic tilt on left side (temple down)

• To raise the left lens
  – Add pantoscopic tilt on left side (temple down)
  – Add retroscopic tilt on right side (temple up)

• To Lower left lens
  – Add retroscopic tilt on left side (temple up)
  – Add pantoscopic tilt on right side (temple down)

General Vision Complaints

• Critically define the complaint
  – Blurry vision
    • Overall, distance, near, elsewhere
  – Double vision
    • Overall, distance, near, elsewhere
  – Perception
    • Often not describable
General Vision Complaints

- Single Vision
- Multifocal
- Specialty Solutions

- First double check that eyewear matches Rx
  - Not just Rx power, but also check for waves and unwanted prism
  - If good Proceed, if not remake
- Compare old eyewear to new
  - Big change maybe the only problem
  - Check all other possibilities before referring back to Refractionist

- Settle the patient
  - If the patient is not cooperative, we can’t resolve the situation.
  - We need to ensure the patient is looking through the center
  - Make sure the patient likes the frame
  - And for that matter, those people with the patient
- check for expected acuity
  - Use an acuity chart at proper distance for eyewear

- When the patient can see clearly, but things are “just weird”
  - Usually means that new lenses are changing Perception, or “visual habits”
  - The go-to answer has always been base curve
  - Could be, but often not the problem

- Change in base curve occurs for a reason
  - If base curve is appropriate due to power change, vision can be clear, but still “weird”
  - This is when it is appropriate to require the patient to wear for a few days to allow the brain to adapt
  - If base curve change is just because the appropriate one was not on hand, remake in the proper base curve
  - Check factory base curve charts to be sure correct base curve for their design was used

- Aspheric and Freeform are exceptions
  - These lenses reduce many of the natural distortions and aberrations inherent in regular lenses
  - Optimum clarity of vision can actually be disconcerting!
  - Essential to check position of wear for the design
Position of Wear

- Applies to all lenses
- Vertex
- Pantoscopic angle
- Face form

Vertex Distance

- This can change the effective power of the correct power lens
- Doesn’t have to match the old glasses, but does need to be at the distance the prescriber intended, or compensated for the new distance
- Changes the patient’s perception – think “feel” of the surrounding world
- Can affect the size the patient perceives

Pantoscopic Angle

- Matching old angle may help, but also may not give best vision.
- Correct Pantoscopic angle is approximately 2° for every millimeter optical center is below pupil center at straight forward gaze.
- Corrects marginal (oblique) astigmatism
- Incorrect angle causes prism and unwanted astigmatism

Face Form

- Matching old angle may help, but also may not give best vision
- Correct face form places the optical center of the lenses perpendicular to the visual axis at straight forward distant gaze (PD)
- Corrects marginal (oblique) astigmatism
- Incorrect angle causes prism and unwanted astigmatism
- 2 degrees of face form for each millimeter of Decentration.

Bifocal Heights
Multifocal position

- Proper position
  - Progressives – Pupil center
  - Trifocals – lower edge of pupil
  - Bifocals – Lower edge of limbus

Multifocal position

- Consider visual habits
  - More often too low than high
- Consider visual tasks
  - Where does the patient do their tasks?
- What about the effect of the distance Rx?

Specialty Solutions

- Slab off
  - When power difference at X90 is 2° or more
- Office Lenses
  - When hours are spent at near/intermediate
- Occupational lenses
  - Over head or intense intermediate