**Objective**

Describe and compare the 'standard' phases of choroidal indocyanine green angiography with the normal phases of retinal fluorescein angiography in a variety of disease states.

**Methods**

The fundus camera-based digital angiograms of 27 consecutive patients who underwent concurrent fluorescein angiography (FA) and indocyanine green (ICG) spectrophotometric vascular bolus dye and the prominent retinoblastoma (RB) of one retinal specialist and one ophthalmic photographer. Normal filling phases and hyper/hypofluorescence were identified and compared in each angiogram.

Recent literature describing ICG angiography was reviewed.1,2,6

**Results**

- The normal course of FA includes these phases:
  - choroidal fill (C)
  - retinal arterial filling (C)
  - retinal venous filling (D)
  - full transit (E)
  - mid recirculation (F)
  - choroidal arterial and venous filling phases (G, H, I, J, K)
- The normal course of ICG includes these phases:
  - choroidal arterial filling (J)
  - choroidal venous filling (K)
  - full transit (L)
  - mid recirculation (M)
  - choroidal arterial and venous filling phases (N, O, P)
- Similarities between normal FA & ICG filling phases:
  - laminar flow during retinal venous filling (D, M)
- Differences between normal FA & ICG filling phases:
  - choroidal arterial and venous filling phase can be distinguished in ICG (J, K)
  - choroidal arterial filling phase (J)
  - choroidal venous filling phase (K)
  - full transit (L)
  - mid recirculation (M)
  - choroidal arterial and venous filling phases (N, O, P)

**Conclusions**

- Vessel filling in both the choroidal and retinal circulations can be identified on ICGA, while the normal phases of FA describe retinal filling patterns only.
- Normal and abnormal hypo/hyperfluorescent angiographic patterns familiar to retinal specialists during the interpretation of FA differ from the hypo/hyperfluorescent patterns found during ICGA.
- Heightened recognition of the spectrum of normal ICGA characteristics during interpretation is encouraged.

**References**