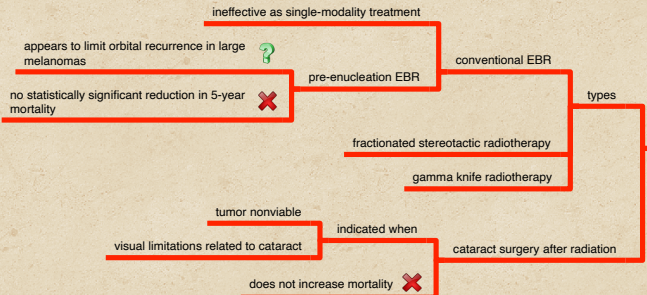


4.17.5. Melanocytic Tumors (V): Melanoma of ciliary body or choroid (III): Treatment

external beam radiation (EBR)

types



choice of treatment option depends on

- size, location, extent of tumor
- visual status of affected & fellow eyes
- age & general health of patient

observation

- to document growth of small melanocytic lesions <1 mm in thickness
- larger tumors in elderly/systemically ill patients not candidates for therapeutic intervention

enucleation

- many large and all extra-large tumors
- pre-enucleation external-beam radiation does not affect 5-year mortality rate (COMS)

brachytherapy (radioactive plaque)

- most common isotopes
 - iodine 125
 - ruthenium 106
- local tumor control rate $\geq 95\%$
- regrowth 10%
- radiation complications
 - optic neuropathy
 - retinopathy
 - dose dependent
 - increased rate for tumors close to macula or optic nerve
 - 50%

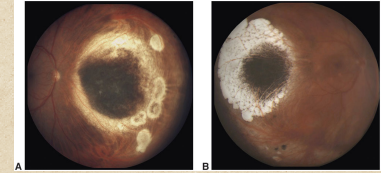


Figure 17-14 (© 2020 American Academy of Ophthalmology)

charged-particle radiation

- charged particles
 - protons
 - helium ions
- mark basal tumor margins with tantalum clips
- compared with radioactive plaque
 - more homogenous radiation dose
 - less lateral spread
 - higher radiation dose to anterior segment structures
- local tumor control rate $\geq 98\%$
- complications
 - neovascular glaucoma 10%
 - vision loss 50%

alternative treatments

