

Q: What are the indications for the use of phospholine iodide and what are its potential side effects?

It is an **indirect - ACh esterase blocker**.

Used topically.

- 1) Phospholine iodide (echothiophate (0.125%?)) - irreversible
- 2) Carbachol - direct and indirect muscarinic agonist

A) *local*

- 1) post. synechiae (from breakdown of blood/aqueous barrier)
- 2) ASCC (from post. synech.)
- 3) Acute ACG
- 4) Aqueous misdirection
- 5) RD
- 6) iris cysts (treated with phenylephrine 2.5%)
- 7) punctal occlusion/stenosis/scarring
- 8) cells in AC, KP's, (from breakdown of blood aqueous barrier)
- 9) hyperemia
- 10) contact dermatitis
- 11) corneal haze
- 12) brow ache
- 13) Cataracts

B) *systemic* (toxicity)

- 1) salivation
- 2) nausea
- 3) sweating
- 4) diarrhea
- 5) hypotension
- 6) muscle tremors
- 7) slurred speech
- 8) abdominal cramps
- 9) blocks both plasma cholinesterase (butyrylcholinesterase, i.e. "pseudocholinesterase") as well as neuromuscular junction cholinesterase and therefore prevents succinylcholine breakdown by plasma cholinesterase during anesthesia which will prevent normal diaphragm function leading to prolonged respiratory paralysis

Indications

- 1) glaucoma (aphakes and pseudophakes only)
- 2) phthyrasis pubis (like insect repellent)
- 3) accommodative ET

Relative contraindications

- 1) asthma
- 2) Parkinson's
- 3) hypertension
- 4) GI spasm
- 5) GU obstruction/spasm
- 6) post-MI