```
fun_thru_ite  THM

⊢  ∀f:(S→T), b:𝔹, p,q:S.
   f(if b→ p else q fi) = if b→ f(p) else f(q) fi
  by RepD THEN (OnVar ‘b’ BoolCases) THEN (AbReduce 0)
END
```