Inference at $*$ 1 1 4 2
 of proof for Lemma gen_hyp_tp:

1. A : Type
2. e : A
3. H : A→Type
4. $\exists x{:}A.\ (e = x)$
5. z : $H(e)$
6. $A \in$ Type
7. $e \in A$
8. $\forall x{:}A.\ (e = x) \in$ Type

$\vdash z \neq 0$
  by (\p.D (get_int_arg ‘i‘ p) p)

  1:

    4. x : A
    5. $e = x$
    6. z : $H(e)$
    7. $A \in$ Type
    8. $e \in A$
    9. $\forall x{:}A.\ (e = x) \in$ Type

    $\vdash z \neq 0$
  .