Because of this part of loop:

if (id[i] == id[p])

id[i] = id[q];

id[p] will eventually be set to id[q], and with this, it will lose reference to the original parent.

This will make the next elements with id[i] == id[p] to not have their values updated.

Example to prove this:

id[p] = 3

id[q] = 5

Suppose

Array

0 1 3 3 5 2 6

0 != 3, is not updated ­<- OK

1 != 3, is not updated ­<- OK

3 == 3, is updated to 5. This is wrong, because after this all comparisons will be made with 5 instead of 3

3 != 5 is not updated. This is wrong, it should be updated

5 == 5 is updated to 5

3 != 5 is not updated. This is wrong, it should be updated

6 != 5 is not updated