

Results

This study was conducted on 20 patients collected from Qalubia/ Egypt.

Regarding age in this study:

Group (A) ranged from 2 to 10 years with a mean age of ± 5.6 years.

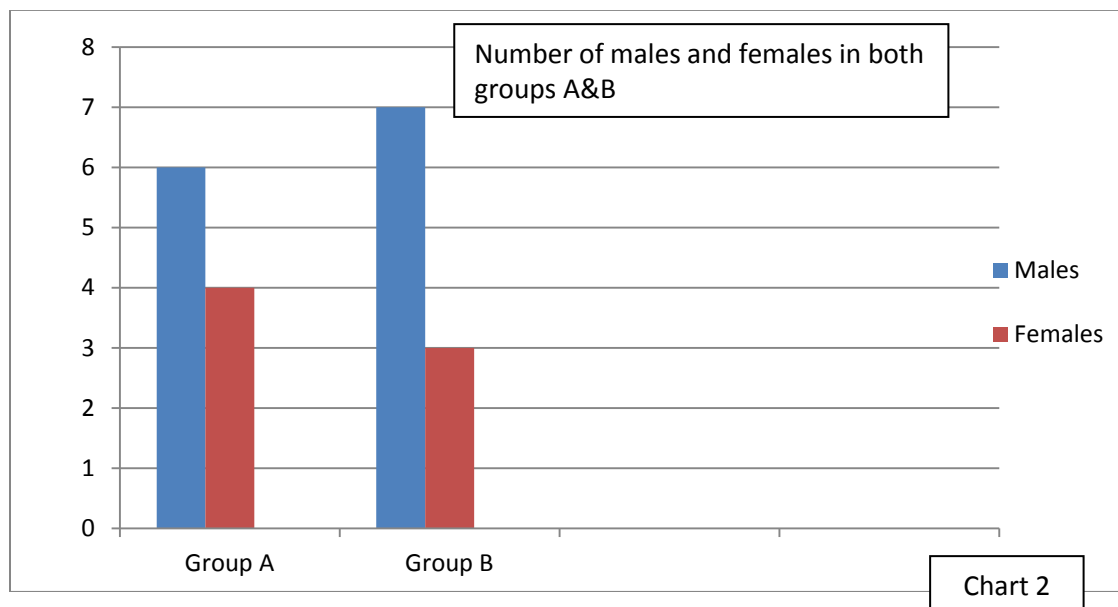
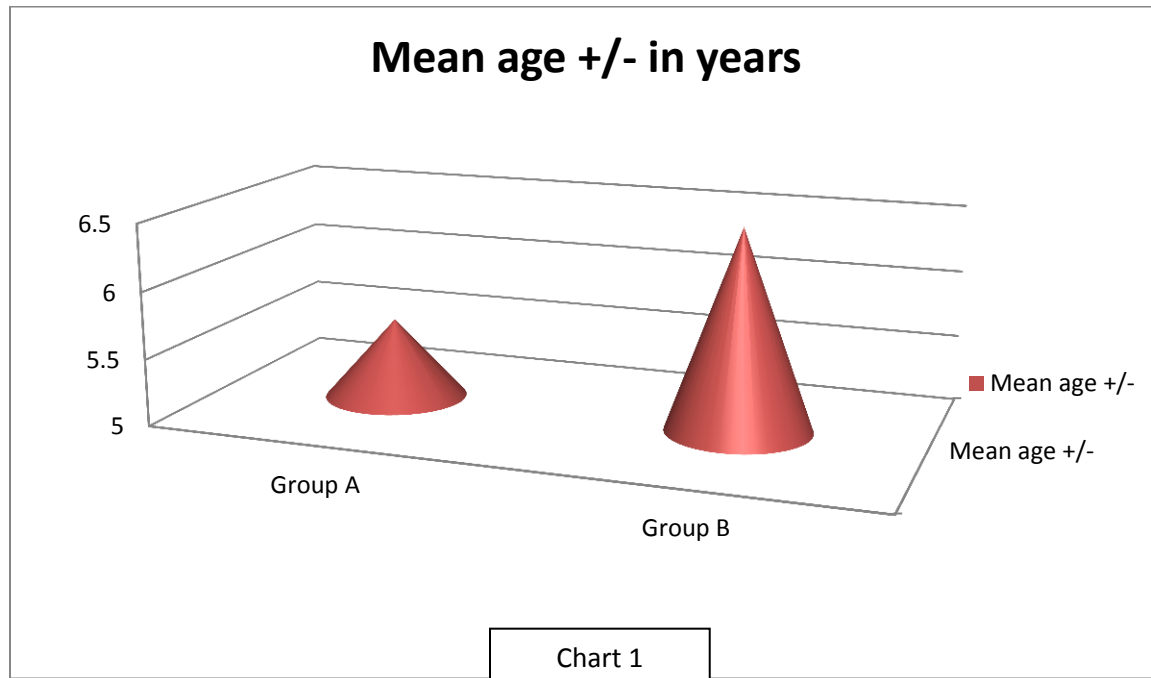
Group (B) ranged from 2 to 25 years with a mean age of ± 6.5 years.

(table 1, chart 1.). Group A showed 6 males and 4 females, group B showed 7 males and 3 females (chart 2).

Patient no.	Group A Age	Group B Age
1	3	4
2	5	5
3	6	6
4	10	2
5	3	3
6	2	3
7	2	6
8	9	7
9	7	4
10	9	25
Mean age	± 5.6 years	± 6.5

Table 1: Mean age of groups A and B

Results



Results

Post operative:

Group A:

During the first week one patient showed total failure of the operation with re-clefting , 4 patients showed fistulae formation at the anterior part of the wound and 5 patients showed no fistulae nor failure with a coapted edges till the end of the first week (chart 3).

In the second week 2 of the patients with fistulae showed widening of the fistulae followed by total failure with re-clefting, while the other 2 showed permanent fistulae (chart 4).

By the end of the second week the 5 patients with coapted edges of the wound at the first week showed complete healing.

The net results after 2 months were(chart 5)

- 5 cases with complete healing.
- 2 cases with permanent fistulae.
- 3 cases with complete failure

Group B:

During the first week one female patient showed total failure after being subjected to accidental trauma to the wound in the 4th day postoperatively due to introduction of a hard object in the mouth leading to loosening of the middle part of the wound stitches Fig(21). 3 patients in the 5th day postoperatively showed exposure of the anterior part of the oral mucosa wound exposing the bioglass disc, although a whitish membrane was seen covering the exposed part. The other 6 patients showed no fistulae nor failure with good coapted wound (chart 3).

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During the second week the patients with exposed bioglass disc showed creeping of the mucosa over the bioglass disc decreasing the exposed diameter , by the end of the second week the exposed parts were very small in size nearly third of its starting size. Patients with coapted wounds were completely healed by the end of the second week (chart 4).

By the end of the third week the 3 patients with exposed oral mucosa were completely healed with no signs of the fistulae apparent.

The net results after 2 months were(chart 5)

- 9 cases with complete healing.
- 1 case with total failure.
- No cases with fistulae.

Number of patients according to healing results after one week

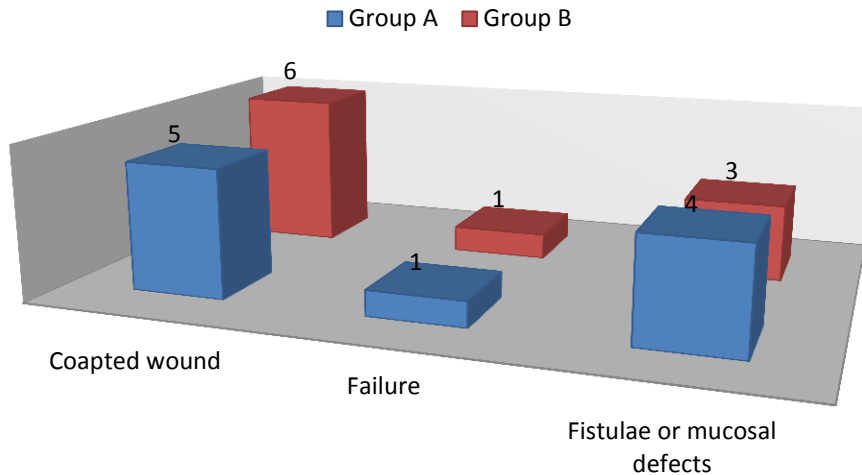


Chart 3

Number of patients according to healing results after two weeks

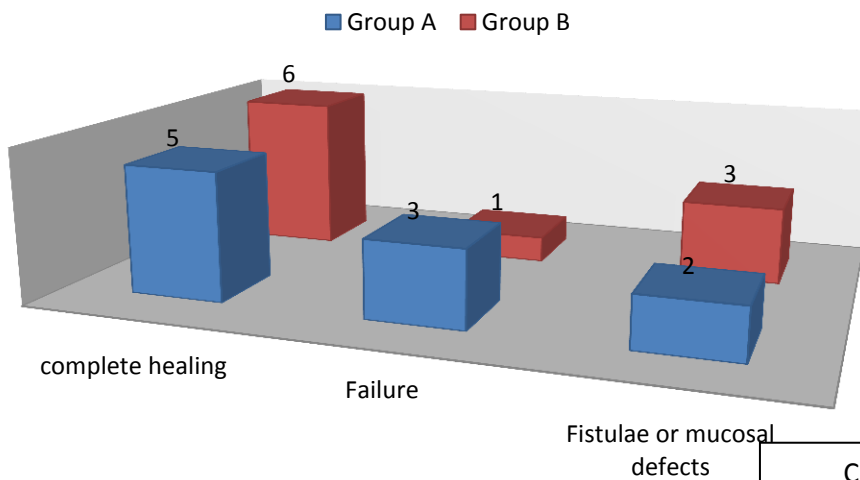
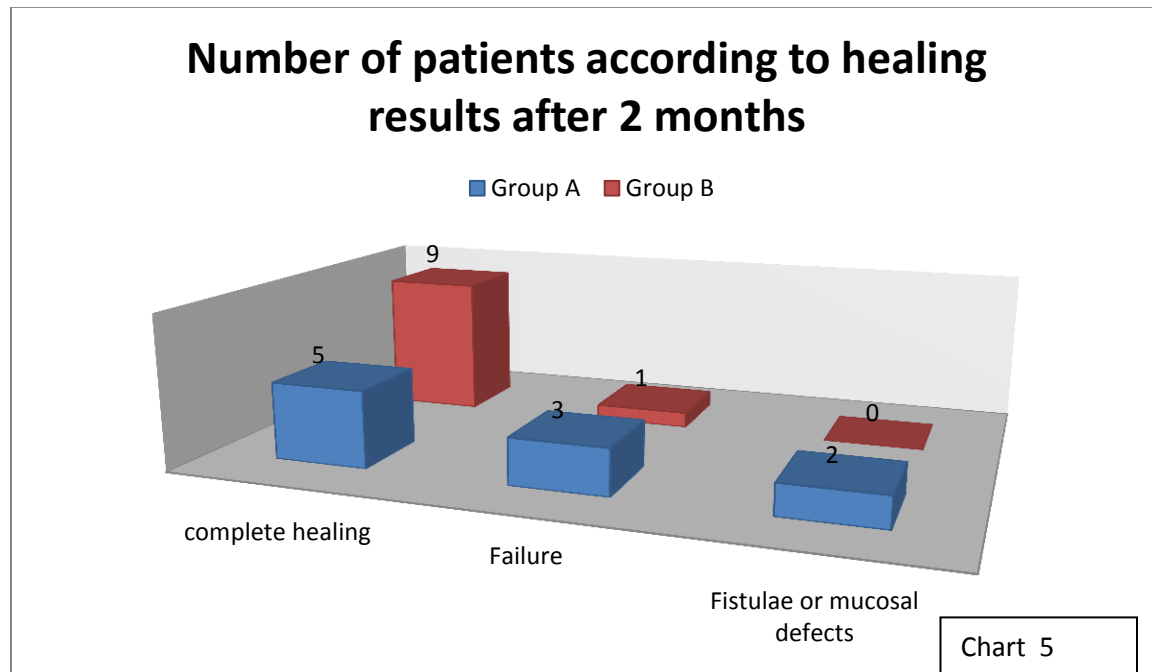


Chart 4



Example photos of patients from group A:

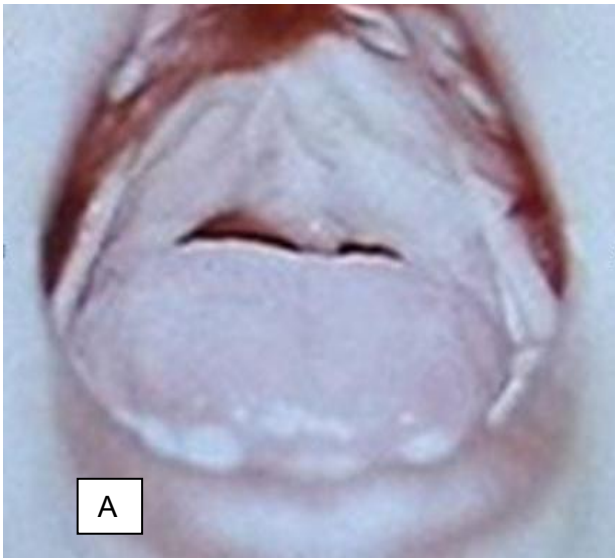


Fig (17):A patient from group A after one week with good coapted edges of the wound

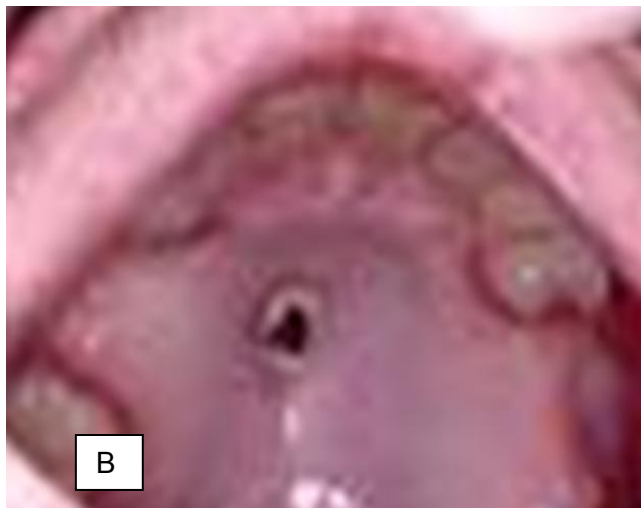


Fig (18):A patient from group A showing fistulization and failure after one week post operative

Results



Fig(19): (A) Patient from group A with complete healing after 2 weeks from the operation, (B& C) 2 patients from group A with permanent fistulae after 2 weeks.



Example photos of patients from group B

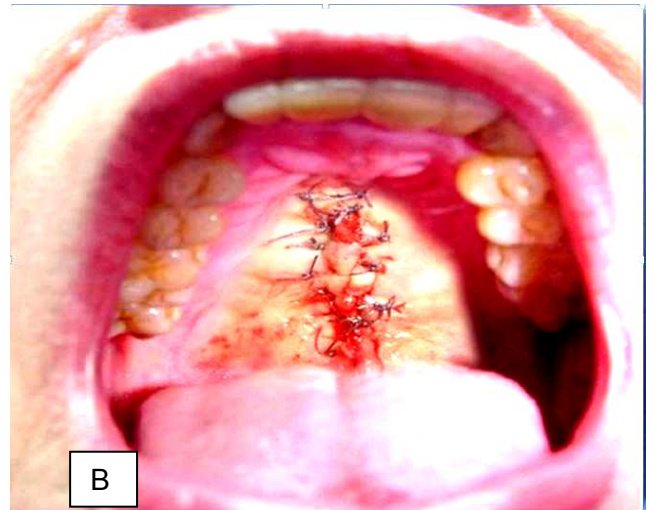
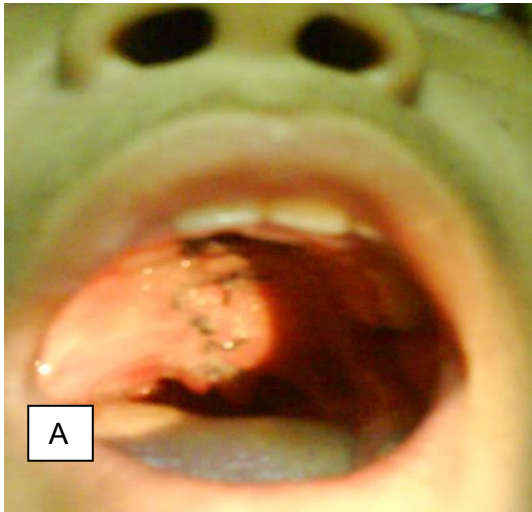


Fig (20):A & B 2 patients from group B after one week with good coapted edges of the wound.

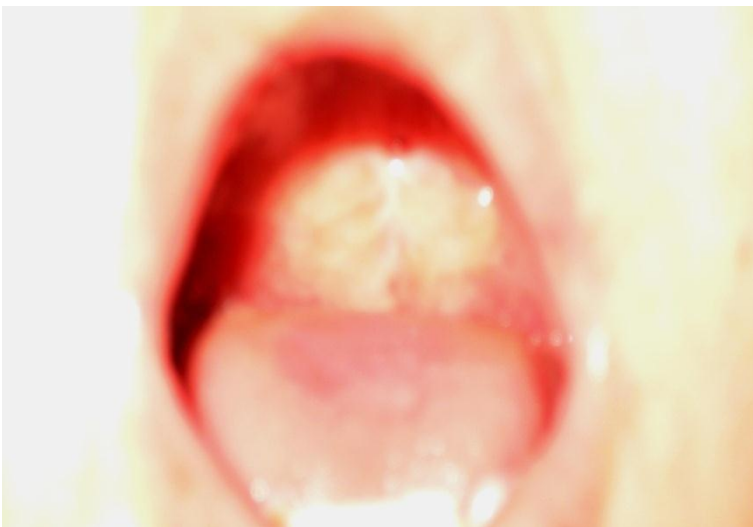


Fig (21):A patient from group B after trauma to the wound 4 days post operative.

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Fig (22):A patient from group B showing oral mucosal defect and exposure of the bioglass disc.



Fig(23): A Patient from group B showing complete healing after 2 weeks .



Fig (24): (A) & (B) Completely healed palate after oral mucosal defects , (C) completely healed palate with no previous defects three weeks from the operation.

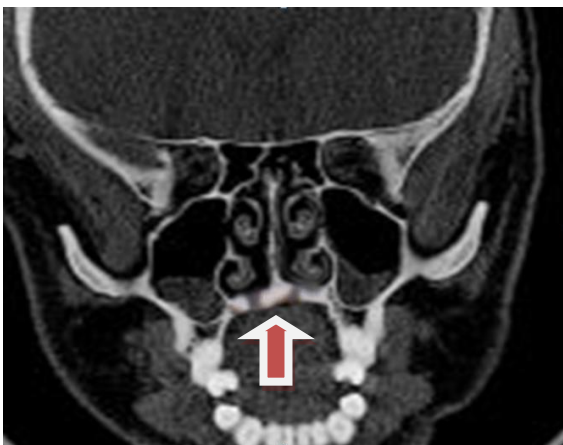
CT Results for group B:

After one week from the operations done for group B, CT of the palate coronal and axial views were done to all patients with no failure (9 patients) i.e. patients with coapted wounds (6 patients) and patients with fistulae(3 patients).

The bioglass disc was well distinguished in the palate by a soft tissue space between it and the bony part of the palate and gum from both sides (fig25).



Fig (25)C.T. of patients from group B after one week.



Results

After six months CTs of the palate coronal and axial views were done for the same 9 patients from group B. All CTs showed no discrepancy between the bioglass discs and the bony palate and gums all around with complete bone formation (fig26).

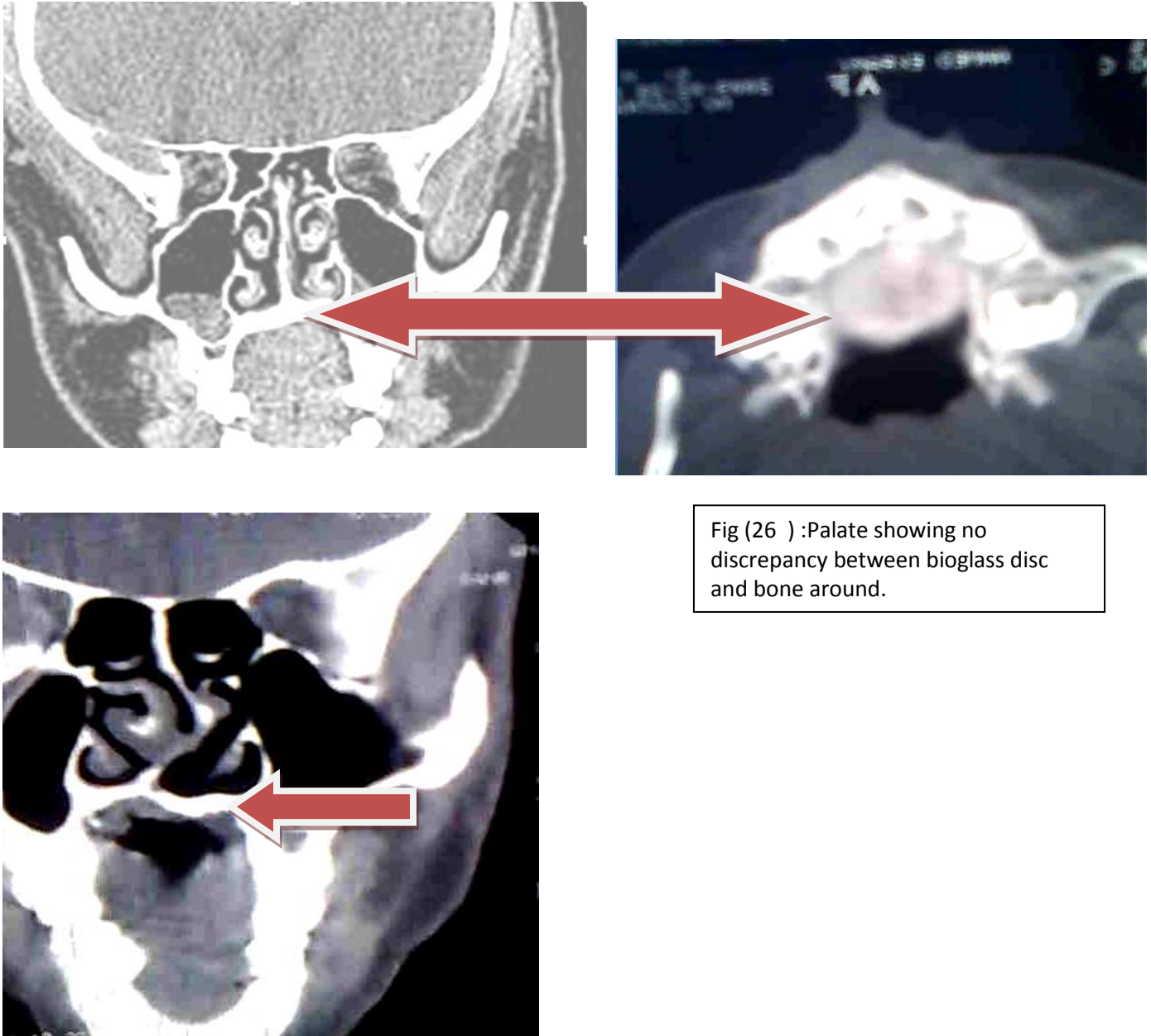


Fig (26) :Palate showing no discrepancy between bioglass disc and bone around.