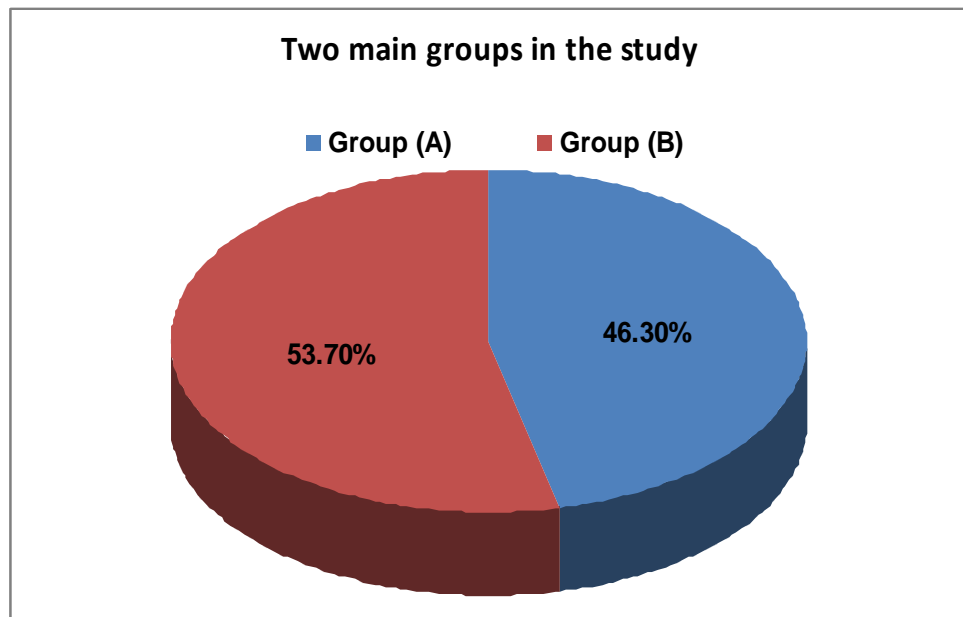


## Results and statistics

**Table (1):** Number of patients included in group A and group B.

	No.	%
<b>A</b>	<b>25</b>	<b>46.3%</b>
<b>B</b>	<b>29</b>	<b>53.7%</b>
<b>Total</b>	<b>54</b>	<b>100%</b>



**Chart (1):** Shows two main groups in the study.

**Group A**, consisted of 25 patients suffering from isolated maxillary chronic sinusitis of total 54 patients included in the study (**46.3%**) as diagnosed with Coronal CT scan, while **Group B** consisted of 29 patients with negative CT findings as regard maxillary chronic sinusitis (**53.7%**) of total patients included in the study.



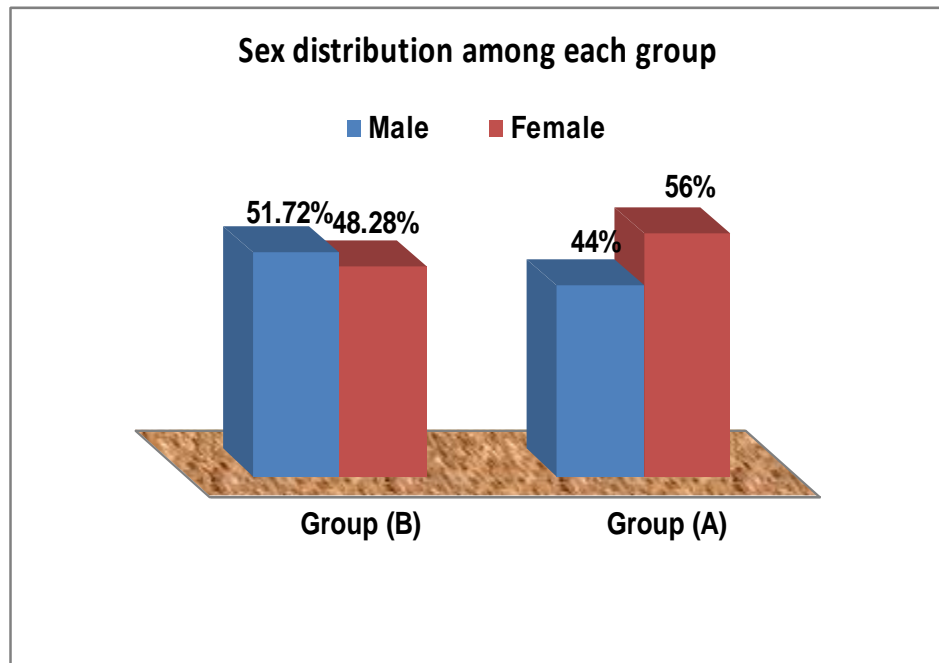
**Figure (27):** Coronal CT scan show bilateral CMS with polypoidal thickening of sinus mucosa of (case no. 33 male of 28 years old).

**Table (2):** Shows sex distribution among group A and group B.

		Sex			Z	P-value
		Male	Female	Total		
A	N	11	14	25	0.1	>0.05
	%	44%	56%	100%		
B	N	15	14	29		
	%	51.72%	48.28%	100%		
Total	N	26	28	54		
	%	48.15%	51.58%	100%		

**Group A** consisted of 25 patients, 11 males and 14 females (44% - 56% respectively) aged 13- 47 years (an average 26.92 years) while **group B** consisted of 29 patients, 15 males and 14 females (51.72% - 48.28% respectively) aged 15- 41 years (an average 25.93 years).

Table 2 shows that there was no statistically significant difference between male and female distribution in the group A in comparison with the group B.



**Chart (2): Shows sex distribution among group A and group B.**

**Table (3): Shows comparison between group A and group B as regard to age.**

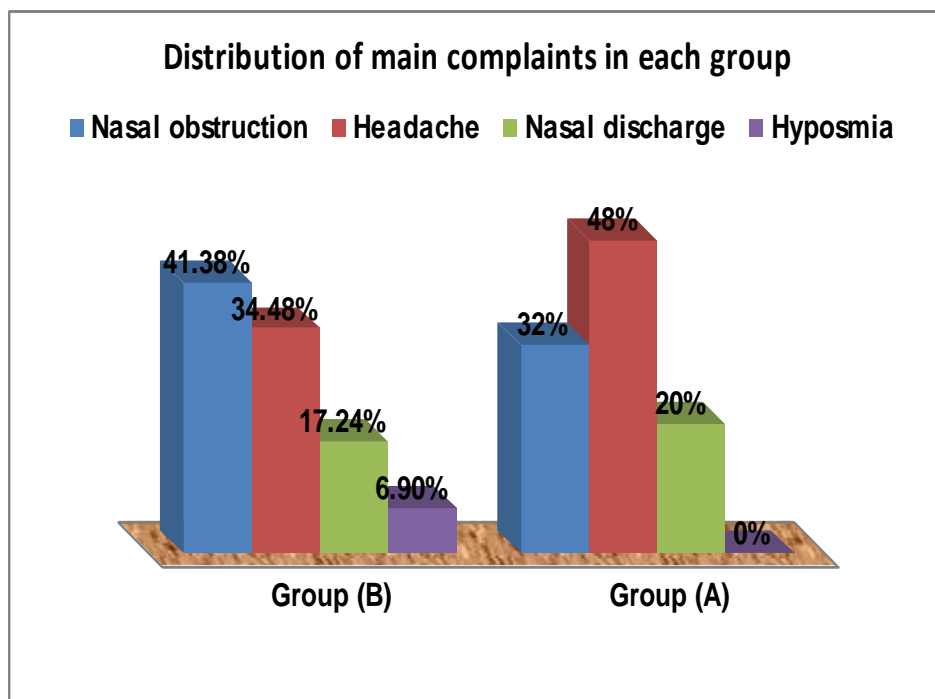
	Age		
	A	B	Total
Range (years)	13- 47	15- 41	13- 47
Mean (years)	26.92	25.93	26.39
± SD	9.1	7.4	
t. test	0.4		
p. value	>0.05		

Table 3 shows that there was no statistically significant difference between group A and group B as regard to age of presentation.

**Table (4):** Shows comparison between group A and group B as regard to distribution of the main complaints.

	<b>A</b>		<b>B</b>		<b>Total</b>	
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
<b>Nasal obstruction</b>	<b>8</b>	32%	<b>12</b>	41.38%	<b>20</b>	37.04%
<b>Headache</b>	<b>12</b>	48%	<b>10</b>	34.48%	<b>22</b>	40.74%
<b>Nasal discharge</b>	<b>5</b>	20%	<b>5</b>	17.24%	<b>10</b>	18.52%
<b>Hyposmia</b>	<b>0</b>	0%	<b>2</b>	6.9%	<b>2</b>	3.7%
<b>Total</b>	<b>25</b>	100%	<b>29</b>	100%	<b>54</b>	100%
<b>X<sup>2</sup></b>	<b>2.7</b>					
<b>P-value</b>	<b>&gt;0.05</b>					

In studying the main complaints of group A patients we noticed that the most common complaint was "headache" (48%), then "nasal obstruction" (32%) and "nasal discharge" was found as the main complaint in (20%), compared with the group B where we found that the most common complaint was "nasal obstruction" (41.38%), then "headache" (34.48%), then "nasal discharge" (17.24%) and the least common was "hyposmia" which appeared in only two patients of group B (6.9%).



**Chart (3):** Shows comparison between group A and group B as regard to distribution of the main complaints.

**Table (5):** Shows comparison between the studied groups regarding presence of AO.

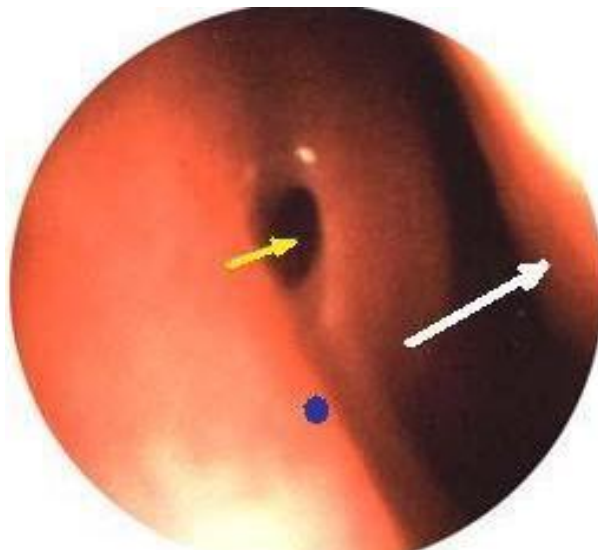
		AO			Z	P-value
		With (I)	Without (II)	Total		
A	N	6	19	25	5.02	<0.05
	%	24%	76%	100%		
B	N	1	28	29		
	%	3.45%	96.55%	100%		
Total	N	7	47	54		
	%	12.96%	87.04%	100%		

**Group (I)** consists of the 7 patients whom we discovered to have AO in the fontanelle region during the endoscopic examination (**12.96%**) of total 54 patients included in the study, while **Group (II)** consists of 47 patients who show no AO in their fontanelle region (**87.04%**).

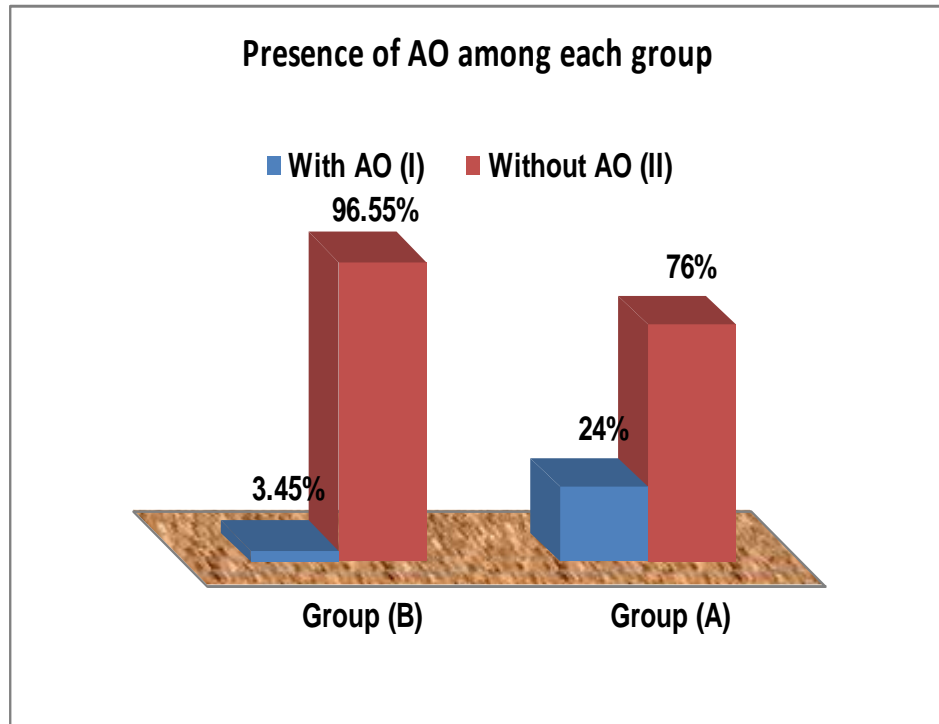
**In group A**, the AO was found in 6 of the 25 patients suffering from maxillary chronic sinusitis (**24%**), and the subgroup A-I refers to these 6 patients, while the subgroup A-II refers to the other 19 patients.

**In group B**, AO was found in 1 of the 29 patients (**3.45%**).

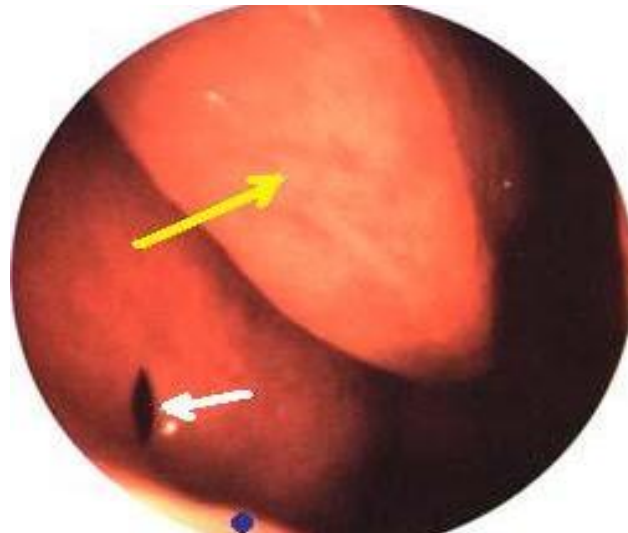
Table 5 shows that there was a statistically significant difference between presence and absence of AO in each group in the study.



**Figure (28): Endoscopic examination photo of the right nasal cavity of (case no. 15 male of 22 years old) using 30° sinoscope showing: (white arrow): MT, (yellow arrow): AO & (blue dot): UP.**



**Chart (4):** Shows comparison between the studied groups regarding presence of AO.



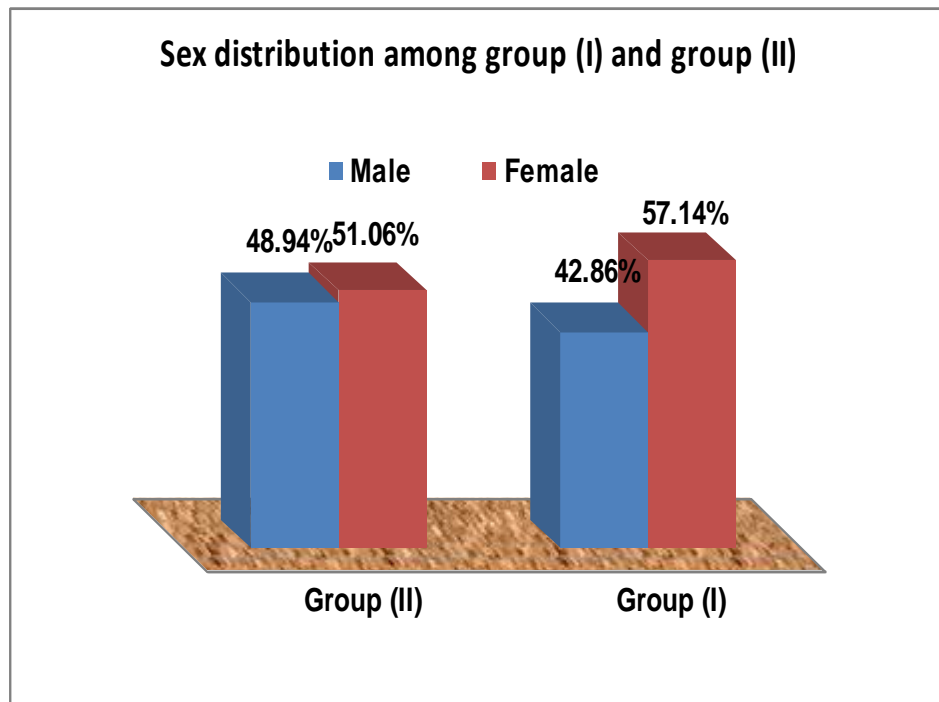
**Figure (29):** Endoscopic examination photo of the right nasal cavity of (case no. 23 male of 36 years old) using 30° sinoscope showing: (Yellow arrow): MT, (white arrow): AO & blue dot: UP.

**Table (6):** Shows sex distribution among group I and group II.

		Sex		
		Male	Female	Total
<b>I</b>	<b>N</b>	<b>3</b>	<b>4</b>	<b>7</b>
	<b>%</b>	<b>42.86%</b>	<b>57.14%</b>	<b>100%</b>
<b>II</b>	<b>N</b>	<b>23</b>	<b>24</b>	<b>47</b>
	<b>%</b>	<b>48.94%</b>	<b>51.06%</b>	<b>100%</b>
<b>Total</b>	<b>N</b>	<b>26</b>	<b>28</b>	<b>54</b>
	<b>%</b>	<b>48.15%</b>	<b>51.85%</b>	<b>100%</b>

**Group I** consisted of 7 patients, 3 males and 4 females (**42.86%- 57.14%**) aged 13 - 47 years (an average 27.43 years) while **Group II** consisted of 47 patients, 23 males and 24 females (**48.94%- 51.06%** respectively) aged 14 - 43 years (an average 26.23 years).





**Chart (5): Shows sex distribution among group I and group II.**

**Table (7): Shows comparison between group I and group II as regard to age.**

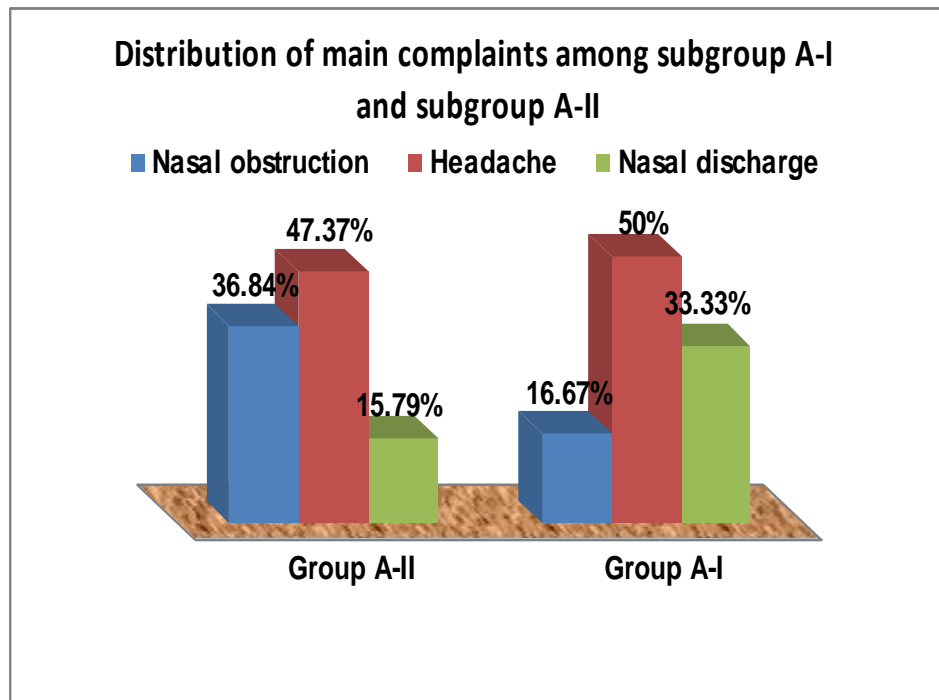
	Age		
	I	II	Total
Range (years)	13- 47	14- 43	13- 47
Mean (years)	27.43	26.23	26.39
± SD	11.5	7.7	
t. test	0.4		
p. value	>0.05		

Table 7 shows that there was no statistically significant difference between group I and group II as regard to age of presentation.

**Table (8):** Shows comparison between subgroup A-I and subgroup A-II as regard to distribution of the main complaints.

	A-I		A-II		Total A	
	No.	%	No.	%	No.	%
<b>Nasal obstruction</b>	<b>1</b>	16.67%	<b>7</b>	36.84%	<b>8</b>	32%
<b>Headache</b>	<b>3</b>	50%	<b>9</b>	47.37%	<b>12</b>	48%
<b>Nasal discharge</b>	<b>2</b>	33.33%	<b>3</b>	15.79%	<b>5</b>	20%
<b>Total</b>	<b>6</b>	100%	<b>19</b>	100%	<b>25</b>	100%
<b>X<sup>2</sup></b>	<b>1.3</b>					
<b>P-value</b>	<b>&gt;0.05</b>					

In studying the main complaints of subgroup A-I (chronic sinusitis with AO) patients we noticed that the most common complaint was "headache" (50%), then "nasal discharge" was found in (33.33%) and "nasal obstruction" was found in (16.67%), compared with the subgroup A-II (chronic sinusitis without AO) where we found that the most common complaint was "headache" (47.37%), then "nasal obstruction" (36.84%), then the least common was "nasal discharge" (15.79%).

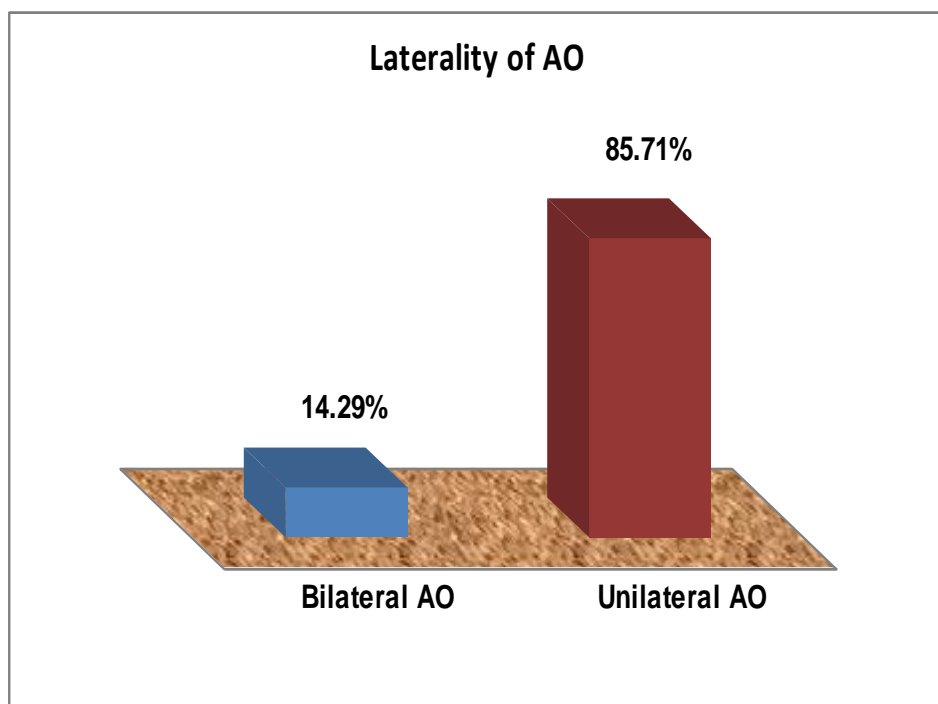


**Chart (6):** Shows comparison between subgroup A-I and subgroup A-II as regard to distribution of the main complaints.

**Table (9):** Shows number of unilateral and bilateral AO.

	AO	
	No.	%
<b>Unilateral</b>	6	85.71%
<b>Bilateral</b>	1	14.29%
<b>Total</b>	7	100%

In group **I** the AO was bilateral in one patient (14.29%) The defect only in the anterior fontanelle was found in one patient. Both anterior and posterior fontanelle defects were found in one patient (14.29%).

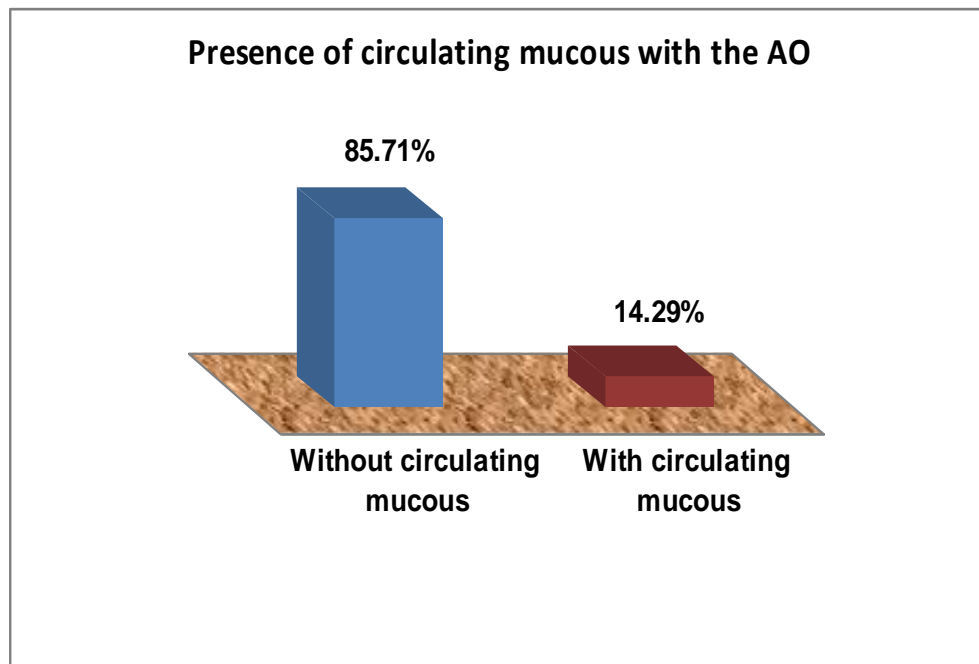


**Chart (7):** Shows percentage of unilateral and bilateral AO.

**Table (10):** Shows number of AO with and without circulating mucous.

	AO	
	No.	%
Without circulating mucous	6	85.71%
With circulating mucous	1	14.29%
Total	7	100%

The circulating mucous was found in one patient (**14.29%**) of those 7 patients exhibiting AO.



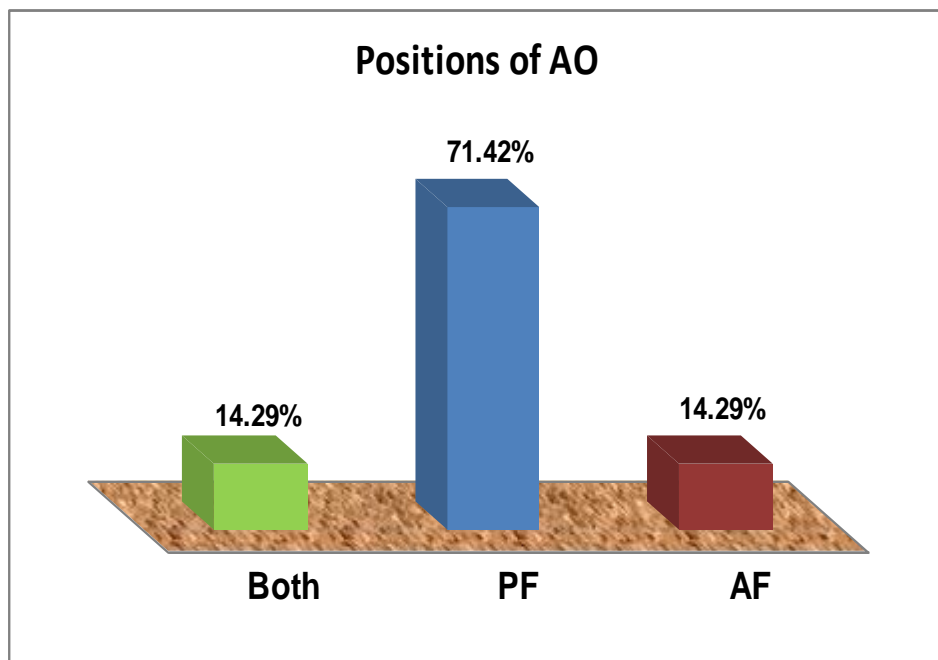
**Chart (8):** Shows percentage of AO with and without circulating mucous.



**Figure (30):** Endoscopic examination photo of the right nasal cavity of (case no. 28 male of 47 years old) using 30° sinoscope showing: A streak of pus (yellow arrow) coming out of a posterior AO of The right maxillary sinus. & (white arrow) points to MT.

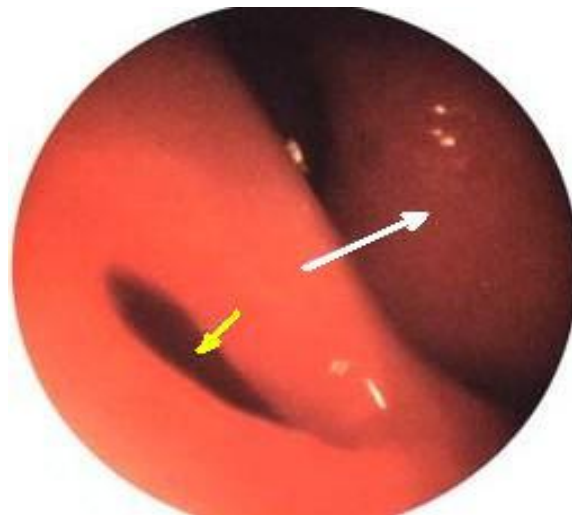
**Table (11):** Shows AO position in AF, PF or both

	AO	
	No.	%
<b>AF</b>	1	14.29%
<b>PF</b>	5	71.42%
<b>Both</b>	1	14.29%
<b>Total</b>	7	100%

**Chart (9):** Shows AO position in AF, PF or both.



**Figure (31):** Endoscopic examination photo of the right nasal cavity of (case no. 52 female of 22 years old) using 30° sinoscope showing: anterior AO (yellow arrow), posterior AO (white arrow) & (blue dot) points to UP.



**Figure (32):** Endoscopic examination photo of the right nasal cavity of (case no. 26 female of 13 years old) using 30° sinoscope showing: anterior AO (yellow arrow) & MT (white arrow).