

Table (1): Time differentials of headache

Character: range (x ± SD)	
Age (years)	19-23 (20.13 ± 1.25), median 20
Period of suffering (months)	0 – 72 (21.96 ± 17.75)
Long lasting of each attack (days)	1- 7 (3.27± 1.76)
No. of sinusitis attack \ year	0 – 8 (3.37 ± 2.787)

Table(2): Main anatomical abnormalities in rhinogenic headache cases

Abnormalities (n = 28 cases)	No.	%
DNS	4	14.2
DNS + ITH	3	10.7
DNS + Concha bullosa	3	10.7
DNS + nasal polyps	3	10.7
DNS + Concha bullosa + ITH	1	3.5
DNS + chronic sinusitis	2	7.14
ITH	2	7.14
ITH + chronic sinusitis	1	3.5
ITH + polyps	1	3.5
Concha bullosa	2	7.14
Haller cells	3	10.7
Total	28	100

Table (3): Rhinogenic headache; type, site, onset and course in anatomical abnormalities cases

Item, no. (col. %)		DNS	CB	Haller cells	ITH	Total
		16	9	2	10	37
Type	Dull				1	1 (2.7 %)
	Heaviness		3 (33.3 %)		3	6 (16.2%)
	Pressure	16 (100%)	6 (66.7 %)	2 (100%)	6	30 (81%)
Significance: P .032						
*Site of pain	Frontal	10	2		3	15 (42.9%)
	Glabellar		5		6	11 (29.7%)
	Periorbital	6	2	2	1	11 (29.7%)
# All cases had gradual onset and stationary course. * no statistically significant difference						

Table (4): Associated nasal symptoms in anatomical abnormalities rhinogenic headache cases

Item No. (%)	Total	DNS	concha	hallar	ITH	*p
	37	16	9	2	10	
Nasal itching						
Present	2 (5.4%)		1		1	.082
Sneezing						
Present	14 (37.8%)	5	4	1	4	.433
Running nose						
Present	10 (27%)	6	2	1	1	.487
Nasal congestion						
Present	20 (54%)	8	3		9	.446
Nasal occlusion						
Present	23(62.1%)	11	2		10	.446
Bleeding nose						
Present	2 (5.4%)		1		1	.082
Post nasal discharge						
Present	8 (21.6%)	5	2		1	.575
Diminished sense of smell						
Present	6 (16.2%)	1	1		4	.516

Table (5): Associated extra nasal symptoms in anatomical abnormalities rhinogenic headache

<i>Item No. (%)</i>	<i>Total</i>	<i>DNS</i>	<i>concha</i>	<i>hallar</i>	<i>ITH</i>	<i>*p</i>
	<i>37</i>	<i>16</i>	<i>9</i>	<i>2</i>	<i>10</i>	
<i>Sore throat</i>						
Present	<i>2 (5.4%)</i>	<i>2</i>				<i>.994</i>
<i>Bad mouth odour</i>						
Present	<i>8 (21.6%)</i>	<i>2</i>	<i>4</i>		<i>2</i>	<i>.271</i>
<i>Chronic cough</i>						
Present	<i>2 (5.4%)</i>	<i>2</i>				<i>.994</i>

Table (6): % of prevailed anatomical abnormalities in some studies

<i>The study</i>	<i>Country</i>	<i>year</i>	<i>S. size</i>	<i>DNS</i>	<i>CB</i>	<i>Hallar</i>	<i>ITH</i>
<i>Tonai et al.</i>	<i>Japan</i>	<i>1996</i>	<i>75</i>	<i>28</i>	<i>25</i>	<i>36</i>	<i>NR*</i>
<i>Pérez et al.</i>	<i>Spain</i>	<i>2000</i>	<i>110</i>	<i>58.2</i>	<i>24.5</i>	<i>45</i>	<i>NR</i>
<i>Mamatha H.et al.</i>	<i>India</i>	<i>2010</i>	<i>40</i>	<i>65</i>	<i>15</i>	<i>17.5</i>	<i>NR</i>
<i>Dutra et al.</i>	<i>Brazil</i>	<i>2005</i>	<i>71</i>	<i>14.1</i>	<i>4.2</i>	<i>1.4</i>	<i>NR</i>
<i>Mazza D et al.</i>	<i>Italy</i>	<i>2007</i>	<i>100</i>	<i>29</i>	<i>11</i>	<i>5</i>	<i>NR</i>
<i>Talaiepour A.R.et al.</i>	<i>Iran</i>	<i>2005</i>	<i>143</i>	<i>63</i>	<i>35</i>	<i>3.5</i>	<i>30</i>
<i>Mohammad A. et al.</i>	<i>Pakistan</i>	<i>2015</i>	<i>77</i>	<i>26</i>		<i>9.1</i>	<i>24</i>
<i>Mostafa H. Mohamed G.,</i>	<i>Egypt; Minia</i>	<i>2012</i>	<i>40</i>	<i>50</i>	<i>27.5</i>	<i>12.5</i>	<i>NR</i>
<i>Rashid A. et al.,</i>	<i>Oman Sultan.</i>	<i>2014</i>	<i>40</i>	<i>60</i>	<i>49</i>	<i>24</i>	<i>28</i>
<i>Mokbel et al.,</i>	<i>Pakistan</i>	<i>2010</i>	<i>120</i>	<i>100</i>	<i>NR</i>	<i>NR</i>	<i>37</i>
<i>Rai U.L. et al. ,</i>	<i>India</i>	<i>2018</i>	<i>50</i>	<i>100</i>	<i>NR</i>	<i>NR</i>	<i>NR</i>
<i>Kanitha MS et al.,</i>	<i>India</i>	<i>2017</i>	<i>65</i>	<i>26</i>	<i>44</i>	<i>NR</i>	<i>25</i>
<i>Sudip</i>	<i>India</i>	<i>2013</i>	<i>40</i>	<i>56</i>	<i>NR</i>	<i>NR</i>	<i>20</i>
<i>Current study</i>	<i>Egypt; Sohag</i>	<i>2019</i>	<i>104</i>	<i>57.1</i>	<i>32.1</i>	<i>7.1</i>	<i>35.7</i>

** NR = not reported*