

**Table 5.1 Endoscopic abnormalities documented in Right Upper zone - includes lateral aspect of middle turbinate and ostiomeatal complex (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	35	21.7%
Excess pneumatization	46	28.6%
Fenestration	1	.6%
Resected	3	1.9%
Spur	8	5.0%
Adhesions	5	3.2%
Mucosal Contact Pressure Zone	59	36.6%
Obstruction	35	21.7%
Retained secretions	2	1.2%
Stenosis	7	4.3%
Crusting	5	3.2%
Hyperaemia	8	5.0%
Polyp	61	37.9%
Pus	34	21.1%
Oedema / Thickening	11	6.8%

**Table 5.2 Endoscopic abnormalities documented in Central Upper Zone - includes medial aspect of middle turbinate, olfactory recess, spheno-ethmoidal recess and Cottle areas 3 and 5 of septum (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	42	26.1%
Perforation	1	.6%
Spur	28	17.4%
Adhesions	4	2.5%
Mucosal Contact Pressure Zone	76	47.2%
Obstruction	5	3.1%
Retained secretions	1	.6%
Other apposing surface abnorm	1	.6%
Crusting	1	.6%
Hyperaemia	5	3.1%
Polyp	21	13.0%
Pus	3	1.9%
Oedema / Thickening	5	3.1%
Other mucosal abnormality	1	.6%

**Table 5.3 Endoscopic abnormalities documented in Left Upper zone - includes lateral aspect of middle turbinate and ostiomeatal complex (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	29	18.0%
Excess pneumatization	35	21.7%
Fenestration	1	.6%
Resected	3	1.9%
Spur	14	8.7%
Adhesions	3	1.9%
Mucosal Contact Pressure Zone	66	41.0%
Obstruction	30	18.6%
Retained secretions	4	2.5%
Stenosis	2	1.2%
Crusting	6	3.7%
Hyperaemia	6	3.7%
Polyp	56	34.8%
Pus	31	19.3%
Oedema / Thickening	10	6.2%
Other mucosal abnormality	2	1.2%

**Table 5.4 Endoscopic abnormalities documented in Right Lower zone - includes inferior turbinate inferior meatus and floor of nose (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	1	.6%
Fenestration	8	5.0%
Resected	6	3.7%
Spur	14	8.7%
Adhesions	2	1.2%
Mucosal Contact Pressure Zone	11	6.8%
Obliteration	1	.6%
Retained secretions	1	.6%
Crusting	3	1.9%
Hyperaemia	5	3.1%
Polyp	16	9.9%
Pus	13	8.1%
Oedema / Thickening	25	15.5%

**Table 5.5 Endoscopic abnormalities documented in Central Lower zone - includes septum Cottle areas 2 and 4 (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	8	5.0%
Perforation	1	.6%
Spur	35	21.7%
Mucosal Contact Pressure Zone	17	10.6%
Other apposing surface abnorm	1	.6%
Crusting	1	.6%
Hyperaemia	4	2.5%
Polyp	2	1.2%
Oedema / Thickening	3	1.9%

**Table 5.6 Endoscopic abnormalities documented in Left Lower zone - includes inferior turbinate inferior meatus and floor of nose (n = 161)**

Endoscopic Abnormalities	Cases	Cases Percent
Deviated	1	.6%
Fenestration	7	4.3%
Resected	7	4.3%
Spur	9	5.6%
Adhesions	1	.6%
Mucosal Contact Pressure Zone	8	5.0%
Obliteration	1	.6%
Crusting	3	1.9%
Hyperaemia	3	1.9%
Polyp	10	6.2%
Pus	8	5.0%
Oedema / Thickening	19	11.8%

**Table 5.7 Chi-squared (with Yates' correction for 2x2 table, d.f.=1) values for crosstabulations between presence of endoscopic abnormalities and pain at specific sites (n = 161)**

Pain site	Endoscopic Abnormality Site					
	R Upper	C Upper	L Upper	R Lower	C Lower	L Lower
R Frontal	5.741*	0.023	0.903	1.089	0.251	0.105
C Frontal	4.723*	1.157	4.108*	1.900	0.000	0.161
L Frontal	0.345	0.413	8.515**	0.005	0.379	0.117
R Orbital	1.007	0.413	0.209	3.880*	1.127	2.393
C Orbital	10.874***	0.731	0.002	4.293*	4.149*	2.967
L Orbital	0.000	0.009	5.549*	0.136	0.374	1.245
R Malar	1.448	0.000	1.193	2.145	0.522	2.442
C Malar	1.898	0.000	3.207	0.077	5.170*	1.399
L Malar	0.000	0.000	2.284	0.136	3.819	1.245
R Lr Jaw	1.140	0.174	0.000	0.304	0.705	0.000
C Lr Jaw	0.727	0.000	0.668	0.316	4.894*	0.298
L Lr Jaw	0.000	0.000	2.140	0.000	4.224*	0.533

\* p<= 0.05      \*\* p<= 0.01      \*\*\* p<= 0.001

**Table 5.8 Crosstabulation of pain in central orbital region by endoscopic abnormalities in right upper area of nose**

	No Endoscopic Abnormality	Endoscopic Abnormality present	Row Total
No pain (Chi sq residual)	19 (8.2)	43 (-8.2)	62 38.5%
Pain (Chi sq residual)	9 (-8.2)	90 (8.2)	99 61.5%
Column total percentage	28 17.4%	133 82.6%	161 100.0%

Chi-Squared = 10.87382 D.F. 1 p = .0010 (Yates Correction)  
 Chi-Squared = 12.32847 D.F. 1 p = .0004 (Before Yates Correction)  
 Lambda = 0.1613 with Pain as dependent variable

**Table 5.9 Chi-squared (with Yates' correction for 2x2 table, d.f.=1) values for crosstabulations between presence of mucosal pressure contact zones and pain at specific sites (n = 161)**

Pain site	Mucosal pressure contact zone site					
	R Upper	C Upper	L Upper	R Lower	C Lower	L Lower
R Frontal	0.414	0.009	1.190	0.000	0.353	0.174
C Frontal	0.000	0.171	0.638	0.002	1.794	0.372
L Frontal	2.012	0.498	8.739**	0.000	0.000	0.000
R Orbital	0.774	0.498	0.004	0.417	1.109	0.000
C Orbital	5.318*	2.024	1.359	0.223	1.163	0.000
L Orbital	3.383	0.136	2.592	0.536	1.350	0.000
R Malar	2.448	0.562	0.692	0.000	0.494	0.239
C Malar	0.000	0.741	0.139	0.001	1.093	0.383
L Malar	0.388	0.698	0.417	0.011	1.350	0.205
R Lr Jaw	3.884*	0.011	0.095	1.117	0.223	0.000
C Lr Jaw	0.218	0.795	0.000	0.000	0.000	0.000
L Lr Jaw	1.402	0.000	0.060	0.261	0.653	0.000

\* p<= 0.05      \*\* p<= 0.01      \*\*\* p<= 0.001

**Table 5.10 Chi-squared (with Yates' correction for 2x2 table, d.f.=1) values for crosstabulations between presence of polyps and pain at specific sites (n = 161)**

Pain site	Polyp site					
	R Upper	C Upper	L Upper	R Lower	C Lower	L Lower
R Frontal	0.401	0.008	0.253	0.000	0.545	0.150
C Frontal	2.245	0.699	1.483	0.000	0.230	0.192
L Frontal	0.050	0.001	0.076	0.000	0.494	0.094
R Orbital	0.050	1.889	0.000	1.805	0.494	0.000
C Orbital	0.289	1.347	0.012	0.336	1.139	0.190
L Orbital	0.218	0.010	0.901	0.000	0.446	0.000
R Malar	0.004	0.000	0.870	0.000	0.423	0.341
C Malar	0.128	0.121	0.101	0.002	0.000	0.981
L Malar	0.218	0.023	0.081	0.178	0.446	0.000
R Lr Jaw	0.686	0.000	1.741	0.290	0.000	0.027
C Lr Jaw	1.235	0.000	0.889	0.128	0.000	0.000
L Lr Jaw	1.374	0.000	0.046	0.806	0.000	0.408

\* p<= 0.05      \*\* p<= 0.01      \*\*\* p<= 0.001

**Table 5.11 Chi-squared (with Yates' correction for 2x2 table, d.f.=1) values for crosstabulations between presence of pus and pain at specific sites (n = 161)**

Pain site	Pus site					
	R Upper	C Upper	L Upper	R Lower	C Lower	L Lower
R Frontal	2.611	0.001	0.244	0.005	N/A	0.000
C Frontal	0.280	0.000	0.174	0.003	N/A	0.212
L Frontal	0.000	0.000	0.577	0.000	N/A	0.000
R Orbital	3.164	0.000	0.000	0.001	N/A	0.000
C Orbital	0.400	0.000	0.000	0.091	N/A	0.241
L Orbital	0.141	0.000	0.000	0.213	N/A	0.000
R Malar	1.568	0.000	0.760	1.747	N/A	0.795
C Malar	0.173	0.000	0.000	0.170	N/A	0.752
L Malar	0.000	0.000	4.045*	0.484	N/A	0.735
R Lr Jaw	0.000	0.000	0.923	0.000	N/A	0.011
C Lr Jaw	0.519	0.000	0.000	1.293	N/A	4.199*
L Lr Jaw	0.049	0.195	1.410	0.083	N/A	1.271

\* p<= 0.05      \*\* p<= 0.01      \*\*\* p<= 0.001  
 N/A= Chi squared Not Applicable (no cases of pus in central lower zone)

**Table 5.12 Partial Chi-squared values for 2-way associations between pain and endoscopic sites from log-linear hierarchical models: separate model for each pain site (n=161)**

Pain site	Endoscopic Abnormality Site					
	R Upper	C Upper	L Upper	R Lower	C Lower	L Lower
R Frontal	4.578*	0.137	0.699	0.523	0.647	0.000
C Frontal	2.554	0.159	4.010*	1.596	0.057	0.325
L Frontal	0.002	0.018	10.403**	0.846	0.616	0.839
R Orbital	0.766	0.368	1.164	0.820	0.346	0.525
C Orbital	10.594**	0.036	0.375	0.063	3.753	0.444
L Orbital	0.537	0.095	6.641**	0.136	0.136	0.284
R Malar	2.385	0.103	2.988	0.021	0.138	1.743
C Malar	3.023	0.442	3.462	0.622	5.636*	0.274
L Malar	0.130	0.322	2.985	0.007	3.395	0.139
R Lr Jaw	4.497*	1.259	0.124	0.048	1.522	0.045
C Lr Jaw	2.825	0.175	2.428	0.000	6.070*	0.085
L Lr Jaw	0.111	0.054	5.509*	0.335	4.580*	0.073

\* p<= 0.05      \*\* p<= 0.01      \*\*\* p<= 0.001

**Table 5.12 Crosstabulation of presence of pain at any site by mucosal pressure contact zones at any site (n = 161)**

	No MCPZ	MCPZ present	Row Total
No pain	9	6	15
Pain	59	87	146
Column total	68	93	161
percent	42.2	57.8	100.0

*Chi squared with Yates Correction = 1.41 p = .23 n.s.*

**Table 5.13 Crosstabulation of presence of pain at any site by polyps at any site (n = 161)**

	No polyps	Polyps present	Row Total
No pain	8	7	15
Pain	80	66	146
Column total	88	73	161
percent	54.7	45.3	100.0

*Chi squared with Yates Correction = 0.00 p = 1.00 n.s.*

**Table 5.14 Crosstabulation of presence of pain at any site by pus at any site (n = 161)**

	No pus	Pus present	Row Total
No pain	11	4	15
Pain	104	42	146
Column total	115	46	161
percent	71.4	28.6	100.0

*Chi squared with Yates Correction = 0.00 p = 1.00 n.s.*