

**Table S1. Changes in the histological characteristics**

<b>Histological parameter, Median (IQR)</b>	<b>Group A:2000-2001 (n=27)</b>	<b>Group B:2010-2011 (n=71)</b>	<b>Group C:2017-2018 (n=83)</b>	<b>P value</b>
<b>Eosinophil count/HPF</b>	3.40 (1.0-26.20)	4.60 (1.2-20.80)	11.20 (2.9-38.25)	0.02*
<b>Eosinophil percentage</b>	0.03 (0.007-0.16)	0.04 (0.008-0.25)	0.12 (0.030-0.3)	<0.01**
<b>Neutrophil count/HPF</b>	6.60 (1.80-14.00)	2.80 (1.00-8.20)	2.00 (0.40-7.40)	0.01**
<b>Neutrophil percentage</b>	0.042 (0.013-0.10)	0.030 (0.01-0.056)	0.023 (0.003-0.067)	0.14
<b>Lymphocyte count/HPF</b>	88.00 (55.40-115.00)	74.00 (49.00-117.40)	55.20 (24.00-100.20)	<0.01**
<b>Lymphocyte percentage</b>	0.64 (0.52-0.74)	0.72 (0.29-0.82)	0.56 (0.39-0.74)	<0.001***
<b>Plasmocyte count/HPF</b>	21.40 (13.20-32.80)	13.40 (7.60-26.60)	12.25 (6.25-24.00)	<0.05*
<b>Plasmocyte percentage</b>	0.13 (0.09-0.24)	0.13 (0.09-0.21)	0.14 (0.07-0.23)	0.86
<b>Total inflammatory cell count/HPF</b>	158.80 (102.00-181.20)	114.20 (79.2-154.80)	112.40 (66.75-159.80)	0.02*

\*  $P < 0.05$ , \*\*  $P < 0.01$ , \*\*\*  $P < 0.001$ , IQR, Interquartile range, HPF, High power field

**Table S2. Changes in the clinical and histological characteristics of NAR-AS**

**patients over 18 years**

	NAR-AS			P (Group A VS B)	P (Group B VS C)	P (Group A VS C)
	Group A:2000-2001	Group B:2010-2011	Group C:2017-2018			
<b>Subjects, n</b>	81	135	152	/	/	/
<b>Smoking, n</b>	42(51.85)	30(22.22)	19(12.5)	<0.001 <sup>***</sup>	0.029 <sup>*</sup>	<0.001 <sup>***</sup>
<b>Revision surgery patients, n (%)</b>	49(60.49)	34(25.19)	22(14.47)	<0.001 <sup>***</sup>	0.022 <sup>*</sup>	<0.001 <sup>***</sup>
<b>Symptom, n (%)</b>						
<b>Nasal obstruction</b>	81(100)	132(97.78)	150(98.68)	0.12	0.67	0.54
<b>Rhinorrhea</b>	80(98.77)	126(93.33)	141(92.76)	0.094	0.85	0.062
<b>Purulent nasal drainage</b>	4(4.94)	9(6.67)	7(4.61)	0.77	0.45	1.00
<b>Head/Facial pain</b>	40(49.38)	45(33.33)	29(19.08)	0.019 <sup>*</sup>	0.006 <sup>**</sup>	<0.001 <sup>***</sup>
<b>Sneezing</b>	16(19.75)	22(16.30)	25(16.45)	0.52	0.97	0.53
<b>Loss of smell</b>	48(59.26)	80(59.26)	102(67.11)	1.0	0.17	0.23
<b>Blood inflammatory cells, median (IQR)</b>						
<b>Eosinophil percentage (%)</b>	0.024 (0.013,0.045)	0.026 (0.011,0.049)	0.028 (0.014,0.052)	0.28	0.24	0.81
<b>Eosinophil absolute number</b>	0.16 (0.08,0.28)	0.20 (0.073,0.32)	0.20 (0.10,0.37)	0.26	0.20	0.79
<b>Neutrophil percentage (%)</b>	0.57 (0.49,0.63)	0.53 (0.47,0.62)	0.55 (0.51,0.62)	0.16	0.39	0.084
<b>Neutrophil absolute number</b>	3.82 (2.85,5.07)	3.63 (2.91,4.82)	3.99 (3.13,4.96)	0.25	0.50	0.79
<b>Tissue inflammatory cells, median (IQR)</b>						
<b>Eosinophil/HPF</b>	2.80 (1.10,8.10)	3.4 (1.05,15.65)	7.0 (2.33,30.80)	0.58	0.094	0.067
<b>Eosinophil %</b>	0.020 (0.007,0.073)	0.039 (0.0081,0.22)	0.087 (0.016,0.31)	0.34	0.11	0.03 <sup>*</sup>
<b>Neutrophil /HPF</b>	7.00 (2.40,13.30)	2.6 (0.80,6.15)	3.0 (0.60,9.40)	0.0042 <sup>**</sup>	0.64	0.014 <sup>*</sup>
<b>Neutrophil %</b>	0.076 (0.018,0.098)	0.03 (0.009,0.52)	0.04 (0.007,0.09)	0.11	>0.99	0.37
<b>Lymphocyte /HPF</b>	91.40 (70.60,113.6)	67.10 (49.05,103.6)	64.00 (30.70,108.2)	0.11	0.48	0.033 <sup>*</sup>
<b>Lymphocyte %</b>	0.66 (0.56,0.74)	0.72 (0.58,0.82)	0.59 (0.46,0.77)	0.38	0.024 <sup>*</sup>	0.38
<b>Plasmocyte /HPF</b>	22.20 (13.50,33.40)	13.70 (7.90,26.55)	11.2 (0(4.90,24.33)	0.048 <sup>*</sup>	0.45	0.012 <sup>*</sup>
<b>Plasmocyte %</b>	0.17 (0.10,0.25)	0.14 (0.1,0.22)	0.1 (0.05,0.23)	0.42	0.29	0.11
<b>Total inflammatory cell /HPF</b>	156.80 (101.4,174.70)	107.4 (78.75,141.4)	122.8 (77.60,178)	0.016 <sup>*</sup>	0.37	0.10

\* P<0.05, \*\* P <0.01, \*\*\* P<0.001, IQR, Interquartile range, HPF, High power field

Figure S1 The Relationship between BMI and Tissue eosinophil percentage

