



ORAL PRESENTATION

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Matrix metalloproteinases, tissue inhibitor of metalloproteinase and transforming growth factor A1 in the remodeling of chronic rhinosinusitis in North China

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Background

To evaluate the expression and roles of matrix metalloproteinases (MMPs), tissue inhibitor of metalloproteinase (TIMP) 1,2,3,4, and transforming growth factor β 1 (TGF- β 1) in chronic rhinosinusitis without nasal polyps (CRSsNP) and with nasal polyps (CRSwNP) in North China.

Method

100 cases of NP tissue, 25 cases of sinus mucosa of CRSsNP and 25 cases of control were enrolled in the present study. ELISA was used to measure MMP-1,2,3,7,8,9,12,13 and TGF- β 1 in homogenization.

Results

MMP-8,9 were the highest among all above MMPs. MMP-8 of NP tissue was much higher than that of CRS and control tissue ($P < 0.001$). MMP-9 of NP tissue was also significantly higher than that of CRSsNP and control tissue ($P < 0.05$). MMP-7 of NP tissue and CRSsNP were much higher than that of control tissue ($P < 0.001$). MMP-2 of CRSsNP tissue was much higher than that of NP and control tissue ($P < 0.001$). TIMP-1,2 were the highest among all the four TIMPs. TIMP-1 of CRSsNP tissue was much higher than that of NP and control tissue ($P < 0.001$ and $P < 0.05$ respectively). TIMP-2 of NP and CRSsNP tissue were much higher than that of control tissue ($P < 0.01$). TIMP-3 of CRSsNP tissue was much higher

than that of NP and control tissue ($P < 0.01$ and $P < 0.05$ respectively). There were no significant difference of TGF- β 1 among the three groups.

Conclusion

Different MMPs and TIMPs may play different roles in the remodeling of CRSsNP and CRSwNP.

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