

عنوان مقاله:

Airflow Simulation inside the Nasal Cavity

محل انتشار:

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خلاصه مقاله:

Filtration of particulate matters in the human nose depends on the Individual aspects of the nasal cavity such as the geometry and flow rate collectively. To better understand the physiology of the nose, a 3D computational model of a human nasal cavity was developed based on the computed tomography (CT) scans of a healthy female. Also, the airflow and distribution patterns were investigated and compared for two different flow rates: 7.5 and 15 L/min. COMSOL Multiphysics was used to analyze the velocity patterns for laminar flow rates of 7.5L/min and 15L/min and the differences were explored and analyzed.

کلمات کلیدی:

Computational fluid dynamics, CFD, Nasal cavity, Airflow analysis, Laminar flow

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