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## Airflow Inside the Nasal Cavity

Treatment Planning & Diagnosis using CFD



making.

## Mohammad Zuber

Several limitations associated with the conventional diagnostic approach,

demands newer methods of evaluation of complicated nasal physiology

and prediction of surgical interventions, made necessary on account of

defects and diseases associated with the nasal cavity. This book presents

the use of a technique based on functional imaging and Computational

Fluid Dynamics (CFD) modeling in generating useful data that can be used

to determine and diagnose the upper airways condition. This study has the

potential to revolutionize the field of medical diagnosis and can provide

deeper insight and understanding of nasal anomalies. CFD along with

conventional objective measurement devices can be effectively utilized to

study the occurrence of revision surgeries. Such a step can be considered

as a milestone and the beneficiaries would be the human subjects who

would not be subjected to intuition based surgeries any more. This field of

'virtual surgery' can be deemed as the future of medical science in days to

come. This book explores the possibility of regularizing the use of CFD as a

diagnostic and decision making tool in treatment planning and decision

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978-3-659-11558-5

