

Otitis Media – the application of personalized medicine

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The application of knowledge to the care of individual patients has evolved. During most of recorded history it was based on experience -- case reports; not until the middle of the 20th Century did randomized control trials (RCT) come to be the "gold standard." But by the beginning of the 21st Century, the limitations of the RCT and their synthesis, the meta analysis, have been recognized with regard to their applicability to an individual patient. With the intense increase in our knowledge base, medicine now can be personalized beyond the possibilities of earlier periods. The approach of personalized medicine requires evaluation of four parameters: the individual patient's **intrinsic susceptibility; intrinsic morbidity, extrinsic susceptibility; and extrinsic morbidity**. The characteristics of the disease agent -- how much and its virulence -- must also be factored in. The application of the knowledge of **intrinsic** and **extrinsic** risk factors and their effect on **susceptibility** and **morbidity** for an individual with otitis media will be presented. These individualized data define the intervention which is instituted based upon whether there is a high susceptibility and/or morbidity or a low susceptibility and/or morbidity from the aggregate of the **intrinsic** and **extrinsic** risk factors.