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Nota di contenuto	1 Finite element head modelling and head injury predictors -- 1.1 Head injury criteria and thresholds -- 1.2 Finite element head models -- References -- 2 Development of a new finite element human head model -- 2.1 Introduction -- 2.2 Methods and Materials -- References -- 3 Validation of YEAHM -- 3.1 Simulation of impacts on cadavers -- References -- 4 Application of numerical methods for accident reconstruction and forensic analysis -- 4.1 Introduction -- 4.2 Vulnerable road user impact - pedestrian kinematics -- 4.3 Case study - pedestrian accident analysis -- 4.4 Finite element vehicle model -- 4.5 MultiBody dummy model -- 4.6 Vehicle-to-pedestrian impact configuration -- 4.7 Analysis of the results -- 4.8 Head to windshield impact -- 4.9 Conclusions -- References. .
Sommario/riassunto	In this work the development of a new geometrically detailed finite element head model is presented. Special attention is given to sulci and gyri modelling, making this model more geometrically accurate than others currently available. The model was validated against experimental data from impact tests on cadavers, specifically

intracranial pressure and brain motion. Its potential is shown in an accident reconstruction case with injury evaluation by effectively combining multibody kinematics and finite element methodology. .