

INTRODUCTION		1
PART 1 METHODOLOGY		15
1.1	MEASUREMENT, DESCRIPTION, EVALUATION	17
1.1.1	INTRODUCTION	19
1.1.2	INSTRUMENTS FOR THE QUANTITATIVE EVALUATION OF THE STRIDE	22
1.1.3	THE ELITE SYSTEM FOR GAIT ANALYSIS	31
1.2	EXPERIMENTAL METHODOLOGIES	39
1.2.1	THE TECHNIQUE OF "RIGID SEGMENTS" ATTACHED TO RIGID ARRAYS	41
1.2.2	CALIBRATED ANATOMICAL SYSTEM TECHNIQUE (CAST) MODEL CALIBRATION JOINT KINEMATICS KINETICS THE REPRESENTATION	46 46 50 51 54 56
1.3	TERMINOLOGY, PARAMETRIZATION AND NORMALIZATION IN GAIT ANALYSIS	63
1.3.1	TERMINOLOGY	65
1.3.2	PARAMETRIZATION AND NORMALIZATION	83
1.3.3	ERROR EVALUATION MEASUREMENT	86
1.4	ANALYTICAL METHODOLOGY	89

PART 2 CLINICAL APPLICATIONS

2.1	LONG TERM FUNCTIONAL ASSESSMENT OF PATIENTS OPERATED ON FOR ARTHRODESIS OF THE LOWER LIMB	105
2.2	A KINEMATIC AND ISOKINETIC EVALUATION OF PATIENTS WITH FLAT FOOT	141
2.3	THE ANALYSIS OF MOVEMENT AND ISOKINETICS IN THE QUANTITATIVE-FUNCTIONAL ANALYSIS OF THE NORMAL AND THE PATHOLOGICAL KNEE	159
2.4	FUNCTIONAL ANALYSIS OF TOTAL KNEE PROSTHESIS PATIENTS	181
2.5	FUNCTIONAL EVALUATION OF DUCHENNE MUSCULAR DYSTROPHY PATIENTS SUBJECTED TO EARLY SURGERY	193
2.6	FUNCTIONAL EVALUATION OF CHILDREN AFTER ROTATIONPLASTY FOR LIMB SALVAGE IN THE TREATMENT OF MALIGNANT TUMORS OF THE DISTAL PART OF FEMUR	243
2.7	GAIT ANALYSIS ASSESSMENT OF PATIENTS OPERATED ON FOR PCA TOTAL HIP REPLACEMENT	265