

Bibliografía



Bibliografía

- Abraham, W.D. y Dimon, J.H.3.(1992). Leg length discrepancy in total hip arthroplasty. *Orthop.Clin.North Am.* **23**, 201-209.
- Albrektsson, T., Branemark, P.I., Hansson, H.A., y Lindstrom, J.(1981). Osseointegrated titanium implants. Requirements for ensuring a long- lasting, direct bone-to-implant anchorage in man. *Acta Orthop.Scand.* **52**, 155-170.
- Amstutz, H.C., Ouzounian, T., Grauer, D., Flink, C., Kirkpatrick, J., y Bassett, L.(1986). The grid radiograph. A simple technique for consistent high- resolution visualization of the hip. *J.Bone Joint Surg.Am.* **68**, 1052-1056.
- Anda, S., Svenningsen, S., Grontvedt, T., y Benum, P.(1990). Pelvic inclination and spatial orientation of the acetabulum. A radiographic, computed tomographic and clinical investigation. *Acta Radiol.* **31**, 389-394.
- Armbuster, T.G., Guerra, J., Resnick, D., y et al(1978). The adult hip: an anatomic study. Part I: The bony landmarks. *Radiology* **128**, 1-10.
- Barmeir, E., Dubowitz, B., y Roffman, M.(1982). Computed tomography in the assessment and planning of complicated total hip replacement. *Acta Orthop.Scand.* **53**, 597-604.
- Bartel, D.L., Bicknell, V.L., y Wright, T.M.(1986). The effect of conformity, thickness, and material on stresses in ultra- high molecular weight components for total joint replacement. *J.Bone Joint Surg.[Am.]* **68**, 1041-1051.
- Bartel, D.L., Burstein, A.H., Toda, M.D., y Edwards, D.L.(1985). The effect of conformity plastic thickness on contact stresses in metal-backed plastic implants. *J.Biomech.Eng.* **107**, 193-199.
- Bastos Mora, F.(1988). *Prótesis sin cementar de la cadera* (Bastos Mora, F., Ed.) 1 edition. Barcelona. 61-94.
- Bergmann, G., Graichen, F., y Rohlmann, A.(1993). Hip joint loading during walking and running, measured in two patients. *J.Biomech.* **26**, 969-990.
- Bierbaum, B.E., Pomeroy, D.L., y Berklaich, F.M.(1993). *La cadera. Diagnóstico y tratamiento de su patología* (Steinberg, M.E., Ed.) 1 edition. Editorial Médica Panamericana S.A., Buenos Aires (Argentina). 1152-1220.
- Bombelli, R.(1985). *Artrosis de la cadera. Clasificación y patogenia. Función de la osteotomía como terapéutica consiguiente*. 2 edition. Salvat, Barcelona. 89-108.
- Brand, R.A., Yoder, S.A., y Pedersen, D.R.(1985). Interobserver variability in interpreting radiographic lucencies about total hip reconstructions. *Clin.Orthop.* 237-239.
- Callaghan, J.J., Dysart, S.H., y Savory, C.G.(1988). The uncemented porous-coated anatomic total hip prosthesis. Two- year results of a prospective consecutive series. *J.Bone Joint Surg.Am.* **70**, 337-346.
- Callaghan, J.J., Salvati, E.A., Pellicci, P.M., Wilson, P.D., Jr., y Ranawat, C.S.(1985). Results of revision for mechanical failure after cemented total hip replacement, 1979 to 1982. A two to five-year follow-up. *J.Bone Joint Surg.Am.* **67**, 1074-1085.
- Capello, W.N.(1986). Preoperative planning of total hip arthroplasty. *Instr.Course.Lect.* **35**, 249-257.
- Capello, W.N.(1989). Fit the patient to the prosthesis. An argument against the routine use of custom hip implants. *Clin.Orthop.* 56-59.
- Chandler, D.R., Tarr, R.R., Gruen, T.A., y Sarmiento, A.(1984). Radiographic assessment of acetabular cup orientation. A new design concept. *Clin.Orthop.* 60-64.
- Clarke, H.J., Jinnah, R.H., Cox, Q.G., y Curtis, M.J.(1992). Computerized templating in uncemented total hip arthroplasty to assess component fit and fill. *J.Arthroplasty* **7**, 235-239.

- Clarke, I.C., Gruen, T., Matos, M., y Amstutz, H.C.(1976). Improved methods for quantitative radiographic evaluation with particular reference to total-hip arthroplasty. *Clin. Orthop.* 83-91.
- Cooper, R.A., McAllister, C.M., Borden, L.S., y Bauer, T.W.(1992). Polyethylene debris-induced osteolysis and loosening in uncemented total hip arthroplasty. A cause of late failure. *J.Arthroplasty* **7**, 285-290.
- Coventry, M.B.(1994a). *Artroplastia. Reemplazos articulares* (Morrey, B., Ed.) 1 edition. Panamericana, Buenos Aires. 19-20.
- Crowninshield, R.D.(1990). *Joint replacement. State of the Art* (Coombs, R., Gristina, A., y Hungerford, D., Eds.) 1 edition. Orthotext, Londres. 3-8.
- Daffner, R.H.(1980). Visual illusions in computed tomography: phenomena related to Mach effect. *AJR.Am.J.Roentgenol.* **134**, 261-264.
- D'Antonio, J., McCarthy, J.C., Bargar, W.L., Borden, L.S., Cappello, W.N., Collis, D.K., Steinberg, M.E., y Wedge, J.H.(1993). Classification of femoral abnormalities in total hip arthroplasty. *Clin. Orthop.* 133-139.
- D'Antonio, J.A.(1992). Periprosthetic bone loss of the acetabulum. Classification and management. *Orthop.Clin.North Am.* **23**, 279-290.
- D'Antonio, J.A., Capello, W.N., Borden, L.S., Bargar, W.L., Bierbaum, B.F., Boettcher, W.G., Steinberg, M.E., Stulberg, S.D., y Wedge, J.H.(1989). Classification and management of acetabular abnormalities in total hip arthroplasty. *Clin. Orthop.* 126-137.
- De _Anta, J.(1997). *Revisión protésica de cadera. Principios y técnica.*, 1 edition. GALINDO. Artes gráficas., Murcia. España.
- Delagoutte, P., Mainard, D., Dupuy, M., Peltre, G., y G'Sell, C.(1991). [Study of loosening and wear of total hip prosthesis. Apropos of a series followed-up over 10 years]. *Rev.Chir.Orthop.Reparatrice.Appar.Mot.* **77**, 25-33.
- Delp, S.L., Komattu, A.V., y Wixson, R.L.(1994). Superior displacement of the hip in total joint replacement: effects of prosthetic neck length, neck-stem angle, and anteversion angle on the moment-generating capacity of the muscles. *J.Orthop.Res.* **12**, 860-870.
- DeOrio, J.K. y Blasser K.E.(1994). *Artroplastia. Reemplazos articulares* (Morrey, B., Ed.) 1 edition. Panamericana, Buenos Aires. 477-488.
- Deyerle, W.M.(1967). Complications of hip prostheses: an atlas of new preventive technical aids. *Clin. Orthop.* **53**, 61-79.
- DiMaio, F., Lewallen, D.G., McGann, W.A., y Santore, R.F.(1997). *Actualizaciones en cirugía ortopédica y traumatología. Orthopaedic Knowledge Update 5* (Kasser, J.R., Ed.) MASSON, S.A.. (American Academy of Orthopaedic Surgeons), Barcelona. 399-437.
- Dutreix, J., Desgrez, A., Bok, B., y Chevalier, C.(1980). *Física y biofísica: radiaciones*, primera edición. Editorial AC, Madrid.
- Ebert, F.R., Hussain, S., y Krackow, K.A.(1992). Total hip arthroplasty for protrusio acetabuli: a 3- to 9-year follow up of the Heywood technique. *Orthopedics* **15**, 17-20.
- Eckrich, S.G., Noble, P.C., y Tullos, H.S.(1994). Effect of rotation on the radiographic appearance of the femoral canal. *J.Arthroplasty* **9**, 419-426.
- Eggle, S., Pisan, M., y Muller, M.E.(1998). The value of preoperative planning for total hip arthroplasty. *J.Bone Joint Surg.Br.* **80**, 382-390.
- Engh, C.A., Bobyn, J.D., y Glassman, A.H.(1987). Porous-coated hip replacement. The factors governing bone ingrowth, stress shielding, and clinical results. *J.Bone Joint Surg.Br.* **69**, 45-55.

- Engh, C.A., Hooten, J.P., Jr., Zettl Schaffer, K.F., Ghaffarpour, M., McGovern, T.F., y Bobyn, J.D.(1995). Evaluation of bone ingrowth in proximally and extensively porous-coated anatomic medullary locking prostheses retrieved at autopsy. *J.Bone Joint Surg.Am.* **77**, 903-910.
- Fackler, C.D. y Poss, R.(1980). Dislocation in total hip arthroplasties. *Clin.Orthop.* 169-178.
- Fessy, M.H., Seutin, B., y Bejui, J.(1997). Anatomical basis for the choice of the femoral implant in the total hip arthroplasty. *Surg.Radiol.Anat.* **19**, 283-286.
- Finerman, G.A., Dorey, F.J., Grigoris, P., y McKellop, H.A.(1998). *Total hip arthroplasty outcomes*, first edition. CHURCHILL LIVINGSTONE, New York. 3-12.
- Fitzgerald, R.H., Jr., Brindley, G.W., y Kavanagh, B.F.(1988). The uncemented total hip arthroplasty. Intraoperative femoral fractures. *Clin.Orthop.* 61-66.
- Friberg, O.(1983). Clinical symptoms and biomechanics of lumbar spine and hip joint in leg length inequality. *Spine.* **8**, 643-651.
- Garg, A., Deland, J., y Walker, P.S.(1985). Design of intramedullary femoral stems using computer graphics. *Eng.Med.* **14**, 89-93.
- Giles, K.G. y Taylor, J.R.(1981). Low-back pain associated with leg length inequality. *Spine.* **6**, 510-521.
- Goldring, S.R., Jasty, M., Roelke, M.S., Rourke, C.M., Bringhurst, F.R., y Harris, W.H.(1986). Formation of a synovial-like membrane at the bone-cement interface. Its role in bone resorption and implant loosening after total hip replacement. *Arthritis Rheum.* **29**, 836-842.
- Goodman, S., Rubenstein, J., Schatzker, J., Kadish, L., y Fornasier, V.(1987). Apparent changes in the alignment of the femoral component in hip arthroplasties associated with limb positioning. *Clin.Orthop.* 242-245.
- Goodman, S.B., Adler, S.J., Fyhrie, D.P., y Schurman, D.J.(1988). The acetabular teardrop and its relevance to acetabular migration. *Clin.Orthop.* 199-204.
- Gorski, J.M. y Schwartz, L.(1986). A device to measure X-ray magnification in preoperative planning for cementless arthroplasty. *Clin.Orthop.* 302-306.
- Graichen, F. y Bergmann, G.(1991). Four-channel telemetry system for in vivo measurement of hip joint forces. *J.Biomed.Eng.* **13**, 370-374.
- Greenwald, A.S.(1993). *La cadera. Diagnóstico y tratamiento de su patología* (Steinberg, M.E., Ed.) 1 edition. Editorial Médica Panamericana S.A., Buenos Aires (Argentina). 76-84.
- Gruen, T.A., McNeice, G.M., y Amstutz, H.C.(1979). "Modes of failure" of cemented stem-type femoral components: a radiographic analysis of loosening. *Clin.Orthop.* 17-27.
- Guenther, K.P., Tomczak, R., Kessler, S., Pfeiffer, T., y Puhl, W.(1995). Measurement of femoral anteversion by magnetic resonance imaging-- evaluation of a new technique in children and adolescents. *Eur.J.Radiol.* **21**, 47-52.
- Gustilo, R. B., Campbell, M. P., y Pujalte, J.A new method of preoperative planning to maintain leg length in total hip arthroplasty. (1996). Annual Meeting Proceeding, AAOS
- Harris, W.H., Mulroy, R.D., Jr., Maloney, W.J., Burke, D.W., Chandler, H.P., y Zalenski, E.B.(1991). Intraoperative measurement of rotational stability of femoral components of total hip arthroplasty. *Clin.Orthop.* 119-126.
- Havelin, L.I., Espehaug, B., Vollset, S.E., y Engesaeter, L.B.(1995). Early aseptic loosening of uncemented femoral components in primary total hip replacement. A review based on the Norwegian Arthroplasty Register. *J.Bone Joint Surg.Br.* **77**, 11-17.
- Hierton, C., Blomgren, G., y Lindgren, U.(1983). Factors associated with early loosening of cemented total hip prostheses. *Acta Orthop.Scand.* **54**, 168-173.

- Hodge, W.A., Carlson, K.L., Fijan, R.S., Burgess, R.G., Riley, P.O., Harris, W.H., y Mann, R.W.(1989). Contact pressures from an instrumented hip endoprosthesis. *J.Bone Joint Surg.Am.* **71**, 1378-1386.
- Huddleston, H.D.(1997). An accurate method for measuring leg length and hip offset in hip arthroplasty. *Orthopedics.* **20**, 331-332.
- Jasty, M., Webster, W., y Harris, W.(1996). Management of limb length inequality during total hip replacement. *Clin.Orthop.* 165-171.
- Jensen, J.S. y Retpen, J.B.(1987). Failures with the Judet noncemented total hip. *Acta Orthop.Scand.* **58**, 23-26.
- Johnston, R.C., Brand, R.A., y Crowninshield, R.D.(1979). Reconstruction of the hip. A mathematical approach to determine optimum geometric relationships. *J.Bone Joint Surg.[Am].* **61**, 639-652.
- Johnston, R.C., Fitzgerald, R.H., Jr., Harris, W.H., Poss, R., Muller, M.E., y Sledge, C.B.(1990). Clinical and radiographic evaluation of total hip replacement. A standard system of terminology for reporting results [published erratum appears in J Bone Joint Surg Am 1991 Jul;73(6):952] [see comments]. *J.Bone Joint Surg.Am.* **72**, 161-168.
- Jones, P.R., Hukins, D.W., Porter, M.L., Davies, K.E., Timperley, A.J., Hardinge, K., y Taylor, C.J.(1992). Aseptic loosening of the femoral component in cemented total hip replacement. *J.Biomed.Eng.* **14**, 379-384.
- Keaveny, T.M. y Bartel, D.L.(1995). Mechanical consequences of bone ingrowth in a hip prosthesis inserted without cement [see comments]. *J.Bone Joint Surg.Am.* **77**, 911-923.
- Kim, Y.H., Oh, J.H., y Oh, S.H.(1995). Cementless total hip arthroplasty in patients with osteonecrosis of the femoral head. *Clin.Orthop.* 73-84.
- Kirkpatrick, J.S., Clarke, I.C., Amstutz, H.C., y Jinnah, R.H.(1983). Radiographic techniques for consistent visualization of total hip arthroplasties. *Clin.Orthop.* 158-163.
- Knight, J.L. y Atwater, R.D.(1992). Preoperative planning for total hip arthroplasty. Quantitating its utility and precision. *J.Arthroplasty* **7 Suppl**, 403-409.
- Kobayashi, A., Donnelly, W.J., Scott, G., y Freeman, M.A.(1997). Early radiological observations may predict the long-term survival of femoral hip prostheses. *J.Bone Joint Surg.Br.* **79**, 583-589.
- Laine, H.J., Kontola, K., Lehto, M.U., Pitkanen, M., Jarske, P., y Lindholm, T.S.(1997). Image processing for femoral endosteal anatomy detection: description and testing of a computed tomography based program. *Phys.Med.Biol.* **42**, 673-689.
- Levy, R.N.(1982). The location of the level of femoral neck transection for prosthetic hip arthroplasty. *Clin.Orthop.* 51-52.
- Li, P.L., Jones, N.B., y Gregg, P.J.(1995). Loosening of total hip arthroplasty. Diagnosis by vibration analysis. *J.Bone Joint Surg.Br.* **77**, 640-644.
- Linclau, L., Dokter, G., y Peene, P.(1993). Radiological aspects in preoperative planning and postoperative assessment of cementless total hip arthroplasty. *Acta Orthop.Belg.* **59**, 163-167.
- Linde, F. y Jensen, J.(1988). Socket loosening in arthroplasty for congenital dislocation of the hip. *Acta Orthop.Scand.* **59**, 254-257.
- Mackel, A.M. y Dorr, L.D.(1988). Result of bone ingrowth total hip arthroplasty with relation to bone type. *Trans.Orthop.* **235**, 120-126.
- Maloney, W.J., Davey, J.R., y Harris, W.H.(1992). Bead loosening from a porous-coated acetabular component. A follow-up note. *Clin.Orthop.* 112-114.
- Maquet, P.(1990). [Importance of the position of the greater trochanter]. *Acta Orthop.Belg.* **56**

- McCollum, D.E., Nunley, J.A., y Harrelson, J.M.(1980). Bone-grafting in total hip replacement for acetabular protrusion. *J.Bone Joint Surg.Am.* **62**, 1065-1073.
- McGee, H.M. y Scott, J.H.(1985). A simple method of obtaining equal leg length in total hip arthroplasty. *Clin.Orthop.* 269-270.
- McGroarty, B.J., Morrey, B.F., Cahalan, T.D., An, K.N., y Cabanelas, M.E.(1995). Effect of femoral offset on range of motion and abductor muscle strength after total hip arthroplasty. *J.Bone Joint Surg.Br.* **77**, 865-869.
- Mian, S.W., Truchly, G., y Pflum, F.A.(1992). Computed tomography measurement of acetabular cup anteversion and retroversion in total hip arthroplasty. *Clin.Orthop.* 206-209.
- Mills, H.J., Horne, J.G., y Purdie, G.L.(1993). The relationship between proximal femoral anatomy and osteoarthritis of the hip. *Clin.Orthop.* 205-208.
- Moore, A.T. y Bohlman, H.R.(1943). Metal hip joint: a new case report. *J.Bone Joint Surg.[Am.]* **25**, 688-692.
- Moore, A.T.(1952). Metal hip joint: a new self-locking vitalium prosthesis. *Southern Medical Journal* **4**, 1015-1019.
- Moreland, J.R.(1993). *Operative orthopaedics* (Chapman, M.W., Ed.) 2nd edition. J.B. Lippincott Company, Philadelphia. 1873-1887.
- Moreton, J.C., Claudon, B., Cravoisy, J.C., y Magnien, P.(1986). [Computer-assisted design and production of a femoral hip prosthesis] Conception et fabrication assistée par ordinateur d'une prothèse fémorale de hanche. *Rev.Chir.Orthop.* **72**, 89-96.
- Morrey, B.F.(1994). *Artroplastia. Reemplazos articulares* , 1 edition. Editorial Médica Panamericana, Madrid España.
- Morrey, B.F.(1997). Difficult complications after hip joint replacement. Dislocation. *Clin.Orthop.* 179-187.
- Mose, K.(1980). Methods of measuring in Legg-Calvé-Perthes disease with special regard to the prognosis. *Clin.Orthop.* **150**, 103-108.
- Murray, D.(1996). *Medición de los resultados en ortopedia* (Pynsent, P., Fairbank, J., y Carr, A., Eds.) 1 edition. 221-253.
- Noble, P.C., Alexander, J.W., Lindahl, L.J., Yew, D.T., Granberry, W.M., y Tullos, H.S.(1988). The anatomic basis of femoral component design [see comments]. *Clin.Orthop.* 148-165.
- Ogata, K. y Goldsand, E.M.(1979). A simple biplanar method of measuring femoral anteversion and neck-shaft angle. *J.Bone Joint Surg.[Am.]* **61**, 846-851.
- Pagnano, W., Hanssen, A.D., Lewallen, D.G., y Shaughnessy, W.J.(1996). The effect of superior placement of the acetabular component on the rate of loosening after total hip arthroplasty. *J.Bone Joint Surg.Am.* **78**, 1004-1014.
- Palacios-Carvajal. Clasificación morfológica de los defectos femorales en las artroplastias de recambio protésico. Sus posibilidades terapéuticas. (1998). Congreso Nacional SECOT.
- Paprosky, W.G., Perona, P.G., y Lawrence, J.M.(1994). Acetabular defect classification and surgical reconstruction in revision arthroplasty. A 6-year follow-up evaluation. *J.Arthroplasty* **9**, 33-44.
- Paul, J.P.(1967). Forces transmitted by joint in the human body. *Proc.Inst.Mech.Eng.[H.]* 8
- Phillips, T.W., Nguyen, L.T., y Munro, S.D.(1991). Loosening of cementless femoral stems: a biomechanical analysis of immediate fixation with loading vertical, femur horizontal. *J.Biomech.* **24**, 37-48.
- Pierchon, F., Migaud, H., Duquennoy, A., y Fontaine, C.(1993). [Radiologic evaluation of the rotation center of the hip] Evaluation radiologique du centre de rotation de la hanche. *Rev.Chir.Orthop.Reparatrice.Appar.Mot.* **79**, 281-284.

- Pierchon, F., Pasquier, G., Cotten, A., Fontaine, C., Clarisse, J., y Duquennoy, A.(1994). Causes of dislocation of total hip arthroplasty. CT study of component alignment. *J.Bone Joint Surg.Br.* **76**, 45-48.
- Pospula, W. y Gregorczyk, A.(1990). X-ray evaluation of supraacetabular sclerotic zone in the long- term results of total hip replacement. *Rontgenblatter.* **43**, 467-470.
- Proubasta, I., Gil Mur, J., y Planell, J.A., Eds.(1997a). *Fundamentos de biomecánica y biomateriales*. Primera edición. Ediciones Ergon, s.a., Madrid. 105-126.
- Ranawat, C.S., Dorr, L.D., y Inglis, A.E.(1980). Total hip arthroplasty in protrusio acetabuli of rheumatoid arthritis. *J.Bone Joint Surg.Am.* **62**, 1059-1065.
- Reuben, J.D., Chang, C.H., Akin, J.E., y Lionberger, D.R.(1992). A knowledge-based computer-aided design and manufacturing system for total hip replacement [see comments]. *Clin.Orthop.* 48-56.
- Rothman, R. H., Hearn, S. L., Eng, K. O., y Hozack, W. J.The effect of varying femoral offset on component fixation in cemented total hip arthroplasty. Poster. (1996).
- Rubin, P.J., Leyvraz, P.F., Aubaniac, J.M., Argenson, J.N., Esteve, P., y de Roguin, B.(1992). The morphology of the proximal femur. A three-dimensional radiographic analysis. *J.Bone Joint Surg.Br.* **74**, 28-32.
- Ruiz Fernández, J. A. Estudio morfológico -óseo y radiológico- de los elementos del par kinemático de la articulación de la cadera: sus aplicaciones quirúrgicas. 1-668 (1992). Tesis Doctoral.
- Salvati, E.A., Lieberman, J.R., Huk, O.L., y Evans, B.G.(1995). Complications of femoral and acetabular modularity. *Clin.Orthop.* 85-93.
- Schutzer, S.F. y Harris, W.H.(1993). *La cadera. Diagnóstico y tratamiento de su patología* (Steinberg, M.E., Ed.) 1 edition. Editorial Médica Panamericana S.A., Buenos Aires (Argentina). 1026-1054.
- Schwartz, J.T., Jr., Mayer, J.G., y Engh, C.A.(1989). Femoral fracture during non-cemented total hip arthroplasty. *J.Bone Joint Surg.Am.* **71**, 1135-1142.
- Singh, M., Nagrath, A.R., y Maini, P.S.(1970). Changes in trabecular pattern of the upper end of the femur as an index of osteoporosis. *J.Bone Joint Surg.[Am.]* **45**, 457-467.
- Snorrason, F. y Karrholm, J.(1990). Early loosening of revision hip arthroplasty. A roentgen stereophotogrammetric analysis. *J.Arthroplasty* **5**, 217-229.
- Spalding, T.J.(1996). Effect of femoral offset on motion and abductor muscle strength after total hip arthroplasty [letter]. *J.Bone Joint Surg.Br.* **78**, 997-998.
- Spotorno, L. y Romagnoli, S.The CLS uncemented total hip replacement system. 1/91PROTEK:(1999).
- Steinberg, M.E.(1993). *La cadera. Diagnóstico y tratamiento de su patología* (Steinberg, M.E., Ed.) 1 edition. Editorial Médica Panamericana S.A., Buenos Aires (Argentina). 771-791.
- Stulberg, B.N., Bauer, T.W., Watson, J.T., y Richmond, B.(1989). Bone quality. Roentgenographic versus histologic assessment of hip bone structure. *Clin.Orthop.* 200-205.
- Sutherland, C.J. y Bresina, S.J.(1992). Measurement of acetabular component migration using two-dimensional radiography. *J.Arthroplasty* **7 Suppl**, 377-379.
- Sutherland, C.J., Wilde, A.H., Borden, L.S., y Marks, K.E.(1982). A ten-year follow-up of one hundred consecutive Muller curved- stem total hip-replacement arthroplasties. *J.Bone Joint Surg.Am.* **64**, 970-982.
- Takagi, M., Konttinen, Y.T., Lindy, O., Sorsa, T., Kurvinen, H., Suda, A., y Santavirta, S.(1994). Gelatinase/type IV collagenases in the loosening of total hip replacement endoprostheses. *Clin.Orthop.* 136-144.
- Terjesen, T. y Anda, S.(1990). Ultrasound measurement of femoral anteversion [comment]. *J.Bone Joint Surg.[Br.]* **72**, 726-727.

- Thompson, F.R.(1952). Vitallium intramedullary hip prosthesis; preliminary report. *New York Journal* **52**, 3011-3020.
- Tjernstrom, B., Jakobsson, O., Pech, P., y Rehnberg, L.(1996). Reliability of radiological measurements of the distraction gap during leg lengthening. *Acta Radiol.* **37**, 162-165.
- Treacy, R.B.C.(1997). *Medición de los resultados en traumatología* (Pynsent, P., Fairbank, J., y Carr, A., Eds.) primera edición. Masson, Barcelona. 245-267.
- Tummler, H.P., Stallforth, H., y Ungethum, M.(1990). [Computer-assisted design of individual hip prostheses] Computergestützte Erstellung von individuellen Hüftendoprothesen. *Biomed.Tech.Berlin.* **35 Suppl 3**, 38-39.
- Turula, K.B., Friberg, O., Lindholm, T.S., Tallroth, K., y Vankka, E.(1986). Leg length inequality after total hip arthroplasty. *Clin.Orthop.* **202**, 163-168.
- Walker, P.S. y Robertson, D.D.(1988). Design and fabrication of cementless hip stems. *Clin.Orthop.* 25-34.
- Warren, N.P.(1990). *Joint replacement. State of the Art* (Coombs, R., Gristina, A., y Hungerford, D., Eds.) 1 edición. Orthotext, Londres. 41-42.
- White, A. B. y Committee on professional liability, AAOSA study of 119 closed malpractice claims involving hip replacement. *AAOS Bulletin* (1994).
- Williams, J.F., Gottesman, M.J., y Mallory, T.H.(1982). Dislocation after total hip arthroplasty. Treatment with an above-knee hip spica cast. *Clin.Orthop.* 53-58.
- Williams, J.L.(1993). *La cadera. Diagnóstico y tratamiento de su patología* (Steinberg, M.E., Ed.) 1 edición. Editorial Médica Panamericana S.A., Buenos Aires (Argentina). 952-982.
- Williamson, J.A. y Reckling, F.W.(1978). Limb length discrepancy and related problems following total hip joint replacement. *Clin.Orthop.* 135-138.
- Woolson, S.T. y Harris, W.H.(1985). A method of intraoperative limb length measurement in total hip arthroplasty. *Clin.Orthop.* 207-210.
- Wroblewski, B.M.(1982). Fractured stem in total hip replacement. A clinical review of 120 cases. *Acta Orthop.Scand.* **53**, 279-284.
- Yoder, S.A., Brand, R.A., Pedersen, D.R., y O'Gorman, T.W.(1988). Total hip acetabular component position affects component loosening rates. *Clin.Orthop.* 79-87.
- Zohman, G.L., Kabo, J.M., y Amstutz, H.C.(1993). Computer graphic analysis of endosteal expansion after total hip arthroplasty. *Clin.Orthop.* 192-197.