

## Literaturverzeichnis

- AIGNER, T.; BERTLING, W.; STOSS, H.; WESELOH, G.; von der MARK, K. (1993)  
Independent expression of fibril-forming collagens I, II, and III in chondrocytes of  
human osteoarthritic cartilage  
*J Clin Invest.* Mar; 91(3), 829-837
- AIGNER, T.; VORNEHM, S. I.; ZEILER, G.; DUDHIA, J; MARK, K. von der; BAYLISS, M.  
T. (1997)  
Suppression of cartilage matrix gene expression in upper zone chondrocytes of  
osteoarthritic cartilage  
*Arthritis Rheum.* 40, 562-569
- AIGNER, T., McKENNA, L. (2002)  
Molecular pathology and pathobiology of osteoarthritic cartilage  
*Cell. Mol. Life Sci.* 59, 5-18
- ALTMANN, R.D., FRIES, J. F., BLOCH, D. A., CARSTENS, J.; COOKE, D.; GENANT,  
H.; GOFTON, P.; GROTH, H.; McSHANE, D.; MURPGY, W.; SHARP, J.; SPITZ,  
P.; WILLIMS, C.; WOLFE, F. (1987)  
Radiographic assesment of progression in osteoarthritis  
*Arth. Rheum.* 30, 1214 – 1215
- AMIN, A.R., ATTUR, M.; PATEL, R. N.; THAKKER, G. D.; MARSHALL, P. J.; REDISKE,  
J.; STUCHIN, S. A.; PATEL, I. R.; ABRAMSON, S. B. (1997)  
Superinduction of cyclooxygenase-2 activity in human osteoarthritis-affected  
cartilage. Influence of nitric oxide.  
*J. Clin. Invest.* 99(6), 1231-1237
- AYDELOTTE, M. B., KUETTNER, K. E. (1993),  
Heterogeneity of articular chondrocytes and cartilage matrix  
In: WOESSIONER, J. F., HOWELL, D. S.: Joint cartilage degradation.  
Basic and clinical aspects  
New York, Marcel Dekker, 37

AZER, N. M.; WINALSKI, C. S., MINAS, T. (2004)

MR imaging for surgical planning and postoperative assessment in early osteoarthritis

Radiol. Clin. North Am., 42 (1), 43 – 60

BAKER, M.S., GREEN, S.P., LOWTHER, D.A. (1989)

Changes in the viscosity of hyaluronic acid after exposure to a myeloperoxidase – derived oxidant

Arth Rheum 32 (4), 461 – 467

BENNETT, D.; MAY, C. (1995)

Joint disease of dogs and cats

In: ETTINGER, ST. J.; FELDMANN, E. C. ((Hrsg.)), Textbook of veterinary internal medicine, 4. Ed., Philadelphia, London, W. B. Saunders, 2032 – 2077

BILLINGHURST, R. C., DAHLBERG, L., IONESCU, M., REINER, A., BOURNE, A., RORABECK, C. et al. (1997)

Enhanced cleavage of type II collagen by collagenase in osteoarthritic articular cartilage

J. Clin. Invest. 99, 1534 – 1545

BOLLN, G (2001)

Untersuchung zur immunzellvermittelten Reaktion der Synovialis bei Arthrose unterschiedlichen Schweregrades

Berlin, Freie Univ., Vet. Med. Diss.

BORER, L. R.; PEEL, J. E.; SEEWALD, W., SCHAWALDER, P.; SPRENG, D. E. (2003)

Effect of carprofen, etodolac, meloxicam or butorphanol in dogs with induced acute synovitis

AJVR, 64(11), 1429 – 1438

BRADLEY, P. P.; CHRISTENSEN, R. D.; ROTHSTEIN, G. (1988)

Cellular and extracellular myeloperoxidase in synovial fluid from patients with rheumatoid arthritis

Biochem. J. 250, 81 – 85

BRANDT, K. D., FIFE, R. S., BRAUNSTEIN, E. M. (1991)

Radigraphic grading of the severity of knee osteoarthritis: Relation of the  
Kellgren and Lawrence grade to a based on joint space narrowing, and  
correlation with arthroscopic evidence of articular cartilage degeneration

Arth. Rheum. 34, 1381 – 1386

BRINKER, W.O; PIERMATTEI, D. L.; FLO, G. L. (1993)

Knorpel- und Gelenkveränderungen

IN: BRINKER, W.O; PIERMATTEI, D. L.; FLO, G. L. (1993)

Orthopädie und Frakturbehandlung beim Kleintier

Stuttgart, Schattauer Verlag, 237 – 254

BRUCKNER, P., VAUGHAN, L., WINTERHALTER, K. H. (1985)

Type IX collagen from sternal cartilage of chicken embryo contains covalently  
bound glucosaminoglycan

Proc. Natl. Acad. Sci. USA 82, 2608 – 2612

BRUNNBERG, L. (1987)

Klinische und experimentelle Untersuchungen zu Ätiologie, Pathogenese und  
Therapie der Ruptur des Ligamentum cruciatum craniale im Kniegelenk des  
Hundes

München, Habilitationsschrift

BRUNNBERG, L.; VIEHMANN, B.; WAIBL, H. (1999)

Computergestützte Auswertung von Röntgenbildern zur Erfassung von  
Parametern der Ellbogendysplasie, Teil 2: Stufenbildung im Gelenk

Kleintierpraxis 44, 637 – 646

BUCKWALTER, J. A. (2002)

Articular cartilage injuries

Clin. Ortho. Rel. Res. 402, 21 – 37

BUCKWALTER, J A., MARTIN, J. A., OLMSTEAD, M., ATHANASIOU, K. A., ROSENWASSER, M. P., MOW, V. C. (2003)

Osteochondral repair of primate knee femoral and patellar articular surfaces: implications for preventing post-traumatic osteoarthritis :

Iowa Orthop J. 23, 66-74

BURR, D. B. (2001)

Bone

In: BRANDT, K.D., DOHERTY, M., LOHMANDER,L.S. (Hrsg)

Osteoarthritis

Oxford, New York, Tokyo, Oxford University Press, 125 – 133

CAO, M., WESTERHAUSEN-LARSON, A.; NIBYI, C.; KAVALKOVICH, K.; GEORGESCU, H. I., RIZZO, C. F.; HEBDA, P. A.; STEFANOVIC-RACIC, M.; EVANS, C. H. (1997)

Nitric oxide inhibits the synthesis of type-II collagen without altering Col2A1 mRNA abundance: prolyl hydroxylase as a possible target

Biochem J. May 15; 324 (Pt 1), 305-10

CARRIG, C.B. (1997)

Diagnostic imaging of osteoarthritis

Vet. Clin. North Am. Small Anim. Pract. 27 (4), 777 – 796

CLARK, D. M. (1991)

The biochemistry of degenerative joint disease and its treatment

Compend. Contin. Educ. Pract. Vet 13, 275 – 281

CLARK, I. M., POWELL, L. K., RAMSEY, S., HALLEMANN, B.L., CAWSTON, T. E. (1993)

The measurements of collagene tissue inhibitor of metalloproteinase (TIMP) and collagenase-TIMP complex in synovial fluids from patients with osteoarthritis and rheumatoid arthritis

Arth. Rheum. 36, 372 – 379

CONAGHAN, P. G.; FELSON, D. T. (2004)

Structural associations of osteoarthritis pain: lessons from magnetic resonance imaging

Novartis Found Symp.; 260, 191 – 201

CONNER, J. G.; ECKERSALL, D. (1988)

Acute phase response in the dog following surgical trauma

Res. Vet. Scie. 45, 107 – 110

CONZEMIUS, M. G.; HILL, C. M.; SAMMARCO, J. L.; PERKOWSKI, S. Z. (1997)

Correlation between subjective and objective measures used to determine severity of postoperative pain in dogs

J. Am. Vet. Med. Assoc. 210, 1619 - 1622

COORAY, R., PETERSSON, C. G., HOLMBERG, O. (1993)

Isolation and purification of bovine myeloperoxidase from neutrophil granules

Vet. Immunol. and Immunopath. 38, 261 – 272

COORAY, R., PETERSSON, C. G., GRÖNVIC (1995)

Preparation and characterisation of monoclonal antibodies against myeloperoxidase

Vet. Immunol. and Immunopath. 46, 211 – 221

CREAMER, P., LETHBRIDGE – CEJKU, M.; HOCHBERG, M. C. (1998)

Where does it hurt? Pain localization in osteoarthritis of the knee

Osteoarthritis Cartilage; 6 (5), 318 – 323

CREAMER, P.; HOCHBERG, M. C. (1999)

Why does Osteoarthritis of the knee hurt – sometimes?

British J Rheum 36 (7), 726 – 727

CREMER, M. A., ROSLONIEC, E. F., KANG, A. H. (1998)

The cartilage collagens: a review of their structure, organisation and role in pathogenesis of experimental arthritis in animals and in human rheumatic disease

J. Mol. Med. 76, 275 – 288

DÄMMRICH, K. (1978)

Zur Pathogenese der Arthropathia deformans bei Haustieren

Kleintierpraxis 21, 158 – 166

DAVIS, M.; ETTINGER, W., NEUHAUS, J.; BARCLAY, J.; DEGAL, M. (1992)

Correlates of knee pain among US adults with and without radiographic knee osteoarthritis

J. Rheumatol; 19, 1943 – 1949

DEBY-DUPON, G., GRÜLKE, S. CAUDRON, I., MATHY-HARTERT, M. BENBAREK, H., DEBY, C., LAMY, M., SERTEYN, D. (1998)

Equine neutrophil myeloperoxidase in plasma: design of a radio- immunoassay and first results in septic pathologies

Vet. Immunol. and Immunopath. 66, 257 – 271

DODGE G.R.; POOLE, A. R. (1989)

Immunohistochemical detection and immunochemical analysis of type II collagen degradation in human normal, rheumatoid, and osteoarthritic articular cartilages and in explants of bovine articular cartilage cultured with interleukin 1

J Clin Invest. Feb; 83(2), 647-61.

DOHERTY, M. (1999)

Synovial inflammation and osteoarthritis progression: effects of nonsteroidal antiinflammatory drugs

Osteoarthritis Cartilage 7, 319 – 320

DOBROMYLSKYJ, P.; FLECKNELL, P. A.; LASCELLES B. D.; LIVINGSTON, A.; TAYLOR, P.; WATERMANN-PEARSON, A. (2000)

Pain Assessment

IN: FLECKNELL, P.; WATERMAN-PEARSON, A. (Hrsg.)

Pain Management in Animals

London, Saunders 53 – 79

DONOHUE, J. M.; BUSS, D.; OEGEMA, T. R.; THOMPSON, R. C. (1983)

The effects of indirect blunt trauma on adult canine articular cartilage

J. Bone Joint Surg. 65-A(7), 948 – 956

DORE, S.; PELLETIER, J. P.; DiBATTISSTA, J. A.; TARDIF, G.; BRAZEAU, P., MARTEL-PELLETIER, J. (1994)

Human osteoarthritic chondrocytes possess an increased number of insulin-like growth factor 1 binding sites but are unresponsive to its stimulation. Possible role of IGF-1-binding proteins.

Arthritis Rheum. Feb; 37(2), 253-63.

DUFF, R., CAMPBELL, J. R. (1977)

Long-term results of excision arthroplasty of the canine hip

Vet Rec 101, 181

ECKERSALL, P. D.; CONNER, J. G., HARVIE, J. (1991)

An immunoturbidimetric assay for canine C-reactive protein

Vet. Res. Comm. 15, 17 – 24

ECKERSALL PD, DUTHIE S, TOUSSAINT MJ, GRUYS E, HEEGAARD P, ALAVA M, LIPPERHEIDE C, MADEC F. (1999)

Standardization of diagnostic assays for animal acute phase proteins

Adv. Vet. Med.; 41, 643 - 655

EDWARDS, S. W.; HUGHES, V.; BARLOW, J; BUCKNALL, R. (1988)

Immunological detection of myeloperoxidase in synovial fluid from patients with rheumatoid arthritis

Biochem. J. 250, 81 – 85

EYRE, D.R., WU, J. J., WOODS, P.E., WEIS, M. A. (1991)

A growing family of collagens in articular cartilage: identification of five genetically distinct types

J. Rheumatol., 14, 25 – 27

FACKLAM, N. R. (1984)

Synovial fluid preparation and cytologic analysis

Vet. Tech. 5, 93 – 96

FASSBENDER, H.G. (1975)

Pathologie rheumatischer Erkrankungen

Berlin, Heidelberg, New York, Springer 295 – 318

FERNANDEZ, F. R., GRINDEM, C. B., LIPOWITZ, A. J., PERMAN, V. (1983)

Synovial fluid analysis; preparation of smears for cytologic examination of canine synovial fluid

J. Am. Anim. Hosp. Assoc. 19, 727 – 734

FISCHER, V.H. (1999)

FCI Standard Nr. 122, 29.01.1999, www.drc.de (aufgerufen am 25.07.2006)

FRANSSON, B. A. KARLSTAM, E. BERGSTROM, A. LAGERSTEDT, A. S. PARK, J.S. EVANS, M.A. RGLE, C. A. (2004)

C-reactive Protein in the Differentiation of Pyometra From Cystic Endometrial Hyperplasia/Mucometra in Dogs

J Am Anim Hosp Assoc.;40 (5), 391-399

FUJIMOTO, T., SATO, Y.; SASAKI, N.; TESHIMA, R.; HANANOKA, K.; KITANI, S. (2003)

The canine mast cell activation via CRP.

Biochem Biophys Res Commun. Jan 31;301(1):212-7.

GHIBAUDI, E.; LAURENT, ENZO (2003)

Unraveling the catalytic mechanism of lactoperoxidase and myeloperoxidase

Eur. J. Biochem. 270, 4403 – 4412

GIRKONTAITE, I.; FRISCHHOLZ, S.; LAMMI, P.; WAGNER, K.; SWOBODA, B.; AIGNER, T.; Von der MARK, K. (1996)

Immunolocalization of type X collagen in normal fetal and adult osteoarthritic cartilage with monoclonal antibodies

Matrix Biol. Sep; 15(4), 231-238

GOSH, P (1994)

The role of hyaluronic acid(hyaluronan) in health and disease: interactions with cells, cartilage and components of synovial fluid

Clin. Exp. Rheum. 12, 75 . 76

GOLDBERG, D. L., COHEN, A. S. (1978)

Synovial membrane histopathology in the differential diagnosis of rheumatoid arthritis, gout, pseudogout, systemic lupus erythematosus, infectious arthritis and degenerative joint disease

Medicine 57, 239 – 252

GOLDBERG, D. L., EGAN, M. S., COHEN, A. S. (1982)

Inflammatory synovitis in degenerative joint disease

J Rheum. 9, 204 – 209

GREEN, S. P., BAKER, M. S., LOWTHE, D. A. (1990)

Depolimerisation of synovial fluid hyaluronic acid (HA) by the complete myeloperoxidase (MPO) system may involve the formation of a HA-MPO ionic complex

J. Rheum. 17 (12), 1670 – 1675

GRONDALEN, J. (1979)

Arthrosis with special reference to the elbow joint of young rapidly growing dogs

J. North Vet. Med. 31, 62 – 68

GRULKE, S., BENBAREK, H., DEBY-DUPONT, G., MARTHY-HARTERT, M., FARNIR, F., DEBY, C., LAMY, M., SERTEYN, D. (1999)

Plasma myeloperoxidase level and polymorphonuclear leukocyte activation in horses suffering from large intestinal obstruction requiring surgery: preliminary results

Can. J. Vet. Res. 63, 142 – 147

HALL, L. (2004)

Magnetic Resonance Imaging as a Noninvasive Means for Quantitating the Dimensions of articular cartilage in the Human Knee

Arth. Rheum., 50 (1), 5 – 9

HARADA, S. I.; RODAN, G. A. (2003)

Controll of osteoblast function and regulation of bone mass

Nature 2003, 423: 35 – 41

HARARI, J. (1997)

Clinical evaluation of the osteoarthritic patient

Vet. Clin. Of North Am. 27 (4), 7 – 9

HARRISON, J. E.; SCHULTZ, J. (1976)

Studies on the chlorinating activity of myeloperoxidase.

J Biol Chem. 10;251(5):1371–1374

HAUSELMANN, H. J.; OPPLIGER, L.; MICHEL, B. A.; STEFANOVIĆ-RACIC, M.; EVANS, C. H. (1994)

Nitric oxide and proteoglycan biosynthesis by human articular chondrocytes in alginate culture.

FEBS Lett. Oct 3; 352(3), 361-364

HAYAMI, T., PICKARSKI, M., WESOLOWSKI, G. A., MCLANE, J., BONE, A., DESTEFANO, J., RODAN, G. A., DUONG, L. T. (2004)

The role of the subchondral bone remodeling in Osteoarthritis

Arth Rheum 50, 1193 – 1206

HAYASHI, S.; JINBO, T.; IGUCHI, K.; SHIMIZU, T.; SHIMADA, T.; NOMURA, M.; ISHIDA, Y.; YAMAMOTO, S. (2001)

A comparison of the concentrations of C-reactive Protein and  $\alpha$ 1-Acid glycoprotein in the serum of young and adult dogs with acute inflammation

Vet Res Com 25, 117 – 126

HEINEGÅRD, D., BAYLISS, M., LORENZO, P. (2001)

Biochemistry and metabolism of normal and osteoarthritic cartilage

In: BRANDT, K.D., DOHERTY, M., LOHMANDER,L.S. (Hrsg)

Osteoarthritis

Oxford, New York, Tokyo, Oxford University Press, 73 – 82

HENDERSON, J. P., BYUN, J., TAKESHITA, J., HEINECKE, J. W. (2003)

Phagocytes produce 5-Chlorouracil and 5-Bromouracil, two mutagenic products of Myeloperoxidase, in human Inflammatory tissue

J. Biol. Chem. 278, 26, 23522 – 23528

HERAUD, F., HERAUD, A.; HARMAND, M.F. (2000)

Apoptosis in normal and osteoarthritic human articular cartilage

Ann Rheum Diss Dec; 59(12), 959-65

HEWICKER-TRAUTWEIN, M., CARTER, S. D., BENNET, D., KELLY, D. F. (1999)

Immunocytochemical demonstration of lymphocyte subsets and MHC class II antigen expressions in synovial membranes from dogs with rheumatoid arthritis and degenerative joint disease

Vet. Immunol. Immunopathol. 67, 341 – 357

HOCHBERG, M. C.; LAWRENCE, R. C.; EVERETT, D. F.; CORNONI-HUNTLEY, J. (1989)

Epidemiological associations of pain in osteoarthritis of the knee

Semin. Arthritis Rheum; 18 (suppl. 2), 4- 9

HODGSON, H. J. (1994)

Why measure C reactive protein?

Gastroenterology, 35, 5 – 7

HOLT, I.; COOPER, R.G.; HOPKINS, S. J. (1991)

Relationships between local inflammation, interleukin-6 concentration and the acute phase protein response in arthritis patients.

Eur J Clin Invest. Oct; 21(5):479-84.

HULLAND, T.J. (1993)

Diseases of joints

In: JUBB, K. V.; KENNEDY, P. C.; PALMER, N. (Hrsg.)

Pathology of domestic animals

Academic Press, Inc. 4. Aufl., 138 – 180

HURTER, K.; SPRENG, D.; RYTZ, U.; SCHAWALDER, P.; OTT-KNUSEL, F.;  
SCHMÖKEL, H. (2005)

Measurements of C-reactive protein in serum and lactate dehydrogenase in serum and synovial fluid of patients with osteoarthritis

Vet. J. 169 (2), 281 – 5

HUSSAM, A. A., STANLEY, L. H. (1999)

Nitric oxide modulates the catalytic activity of myeloperoxidase

J. Biol. Chem 275 (8), 5425 – 5430

ICHIMORI, K., FUKUYAMA, N., NAKAZAWA, H. ET AL. (2003)

Myeloperoxidase has directly - opposes effects on nitration reaction - study on myeloperoxidase – deficient patient and myeloperoxidase knockout mice

Free Radic Res (England), May 2003, 37(5), 481 – 489

IEWG (1995)

International Elbow Working Group

Protocol 1995

<http://www.iewg-vet.org/archive/protocol.htm> (aufgerufen am 15.03.2005)

IMHOFF, H., SULZBACHER, I., GRAMPP, S., CZERNY, C., YOUSSEFZADEH, S.,  
KAINBERGER, F. (2003)

Subchondral bone and cartilage disease – a rediscovered functional unit

Invest Radiol 35:10, 581 - 588

JOHANNSSON, M. W., PATARROYO, M., OBERG, F., SIEGBAHN, A.; NILSSON, K.  
(1997)

Myeloperoxidase mediates cell adhesion via the aMb2 integrin ( Mac-1;  
CD11b/CD 18)

J Cell Sci 110, 1133 – 1139

JOHNSON, K. A.; HAY, C. W.; CHU, Q.; ROE, S. C.; CATERSON, B. (2002)

Cartilage-derived biomarkers of osteoarthritis in synovial fluid of dogs with naturally acquired rupture of the cranial cruciate ligament.

Am J Vet Res. Jun; 63(6), 775-81.

JOHNSTON, S. A. (1992)

Conservative and medical managment of hip dysplasia

Vet. Clin. North Am. Small Anim. Pract. 22, 595 – 606

JOHNSTON, S. A.; BUDSBERG, S. C. (1997)

Nonsteroidal anti-inflammatory drugs and corticosteroids for the management of canine osteoarthritis

Vet Clin North Am Small Anim Pract. 27(4), 841-62

KAFKA, V. (2002)

Surface fissures in articular cartilage: new concepts, hypotheses and modeling

Clin. Biomech. 17; 73 – 80

KELLGREN, J. H., LAWRENCE, J. S. (1957)

Radiological assesment of osteoarthrosis

Ann Rheum Dis 16, 494 – 501

KETTLE, A. J.; WINTERBOURNE, C. C. (1997)

Myeloperoxidase: A key regulator of neutrophil oxidant production

Redox Rep., 3, 3 – 15

KETTLE, A. J.; WINTERBOURNE, C. C. (2001)

A kinetic analysis of the catalase activity of myeloperoxidase

Biochemistry 40, 10204 – 10212

KIM, H.; LO, M.; PILLARISETTY, R. (2002)

Chondrocyte apoptosis following intraarticular fracture in humans

Osteoarthritis Cartilage 10; 747 – 749

KJELLGARD – HANSEN, M.; KRISTENSEN, A. T.; JENSEN, A. L. (2003)

Evaluation of a commercially available Enzyme – linked Immunosorbent Assay (ELISA) for the determination of C-reactive protein in canine serum

J. Vet. Med. A50, 164 – 168

KUSHNER, I.; MACKIEWICZ, A. (1987)

Acute phase proteins as disease markers

Disease markers 5, 1 – 11

LAJEUNESSE, D; HILAL, G.; PELLETIER, J.P.; MARTEL-PELETIER, J. (1999)

Subchondral bone morphologic and biochemical alterations in osteoarthritis  
Osteoarthritis Cartilage 7, 321 – 322

LAMMER, B. (2001)

Untersuchung synovialer Parameter aus osteoarthritischen Gelenken beim Hund  
unter besonderer Berücksichtigung des Myeloperoxidasegehalts

Berlin, Freie Univ. Vet. Med. Diss.,

LASCELLES, B. D.X.; BUTTERWORTH, S. J.; WATERMANN, A. (1994)

Post operative analgesic and sedative effects of carprofen and pethidine in dogs  
Vet. Rec. 134: 187 – 191

LEFKOWITZ, D.L.; GELDERMANN, M. P.; FUHRMANN, S.R. et al. (1999)

Neutrophilic myeloperoxidase-macrophage interactions perpetuate chronic  
inflammation associated with experimental arthritis

Clin. Immunol. 91 (2), 145 – 155

LEONHARDT, H. (1990)

Histologie, Zytologie und Mikroanatomie des Menschen

Hrsg.: LEONHARDT, H.: 8.Aufl.

Verlag Georg Thieme, Stuttgart u. New York, S. 111 - 154

LIEBICHER, M.; IVANCIC, M.; HOFFMANN, V.; WENZ, W. (2004)

Early changes in experimental osteoarthritis using the Pond Nuki dog model:  
technical procedure and initial results of in vivo MR imaging

European Radiology, [www.springerlink.com](http://www.springerlink.com) (aufgerufen am 18.11.2004)

LIPIELLO, L., HALL, M. D., MANKIN, H. J. (1977)

Collagen synthesis in normal and osteoarthritic human cartilage

J. Clin. Invest. 59, 593 – 600

LINK, T. M.; STEINBACH, L. S.; GOSH, S.; RIES, M.; LU, Y.; LANE, N.; MAJUMDAR, S.  
(2003)

Osteoarthritis: MR Imaging Findings in different stages of disease and correlation  
with clinical findings

Radiology, 226; 373 – 381

LJUNGGREN, G.; OLSSON, S. E. (1975)

Osteoarthritis of the shoulder and elbow in dogs: A pathologic and radiographic study of a necropsy material

J. Am. Vet. Radiol. Soc. 16, 33

LUST, G.; SUMMERS, B.A. (1981)

Early asymptomatic stage of degenerative joint disease in canine hip joints

Am. J. Vet. Res. 42, 1849-1958

LOHMANDER, S. L. (1991)

Markers of cartilage metabolism in arthrosis: a review

Acta Orthop. Scand. 62, 623 – 632

LOHMANDER, L. S., NEAME, P. J., SANDY, J. D. (1993)

The structure of aggrecan fragments in human synovial fluid- evidence that aggrecanase mediates cartilage degradation in inflammatory joint disease, joint injury and osteoarthritis

Arthritis Rheum. 36, 1214 – 1222

MANKIN, H. J., DORFMANN, H., LIPPIELLO, L., ZARINS, A. (1971)

Biochemical and metabolic abnormalities in articular cartilage from osteoarthritic human hips II. Correlation of morphology with biochemical and metabolic data

J. Bone Joint Surg. 53A, 523

MARTINEZ, S.A. (1997)

Congenital conditions that lead to osteoarthritis in the dog

Vet. Clin. N. Am. Small An. Pract. 27, 759 – 775

MAROUDAS , M. G (1978)

Diffusion-limitation of cell growth.

Nature, Aug 17; 274 (5672), 722

MAYNE, R. (1989)

Cartilage collagens: What is their function and are they involved in articular disease?

Arthritis Rheum 32, 241 - 246

McQUILLAN, D.J.; HANDLEY C. J.; CAMPBELL, M.A.; BOLIS, S., MILWAY, V. E.; HERINGTON, A. C. (1986)

Stimulation of proteoglycan biosynthesis by serum and insulin-like growth factor-I in cultured bovine articular cartilage.

Biochem J., Dec 1; 240(2), 423 - 430

MEERA R.; ANAND, S.; RAMESH, C. V.; PUVANAKRISHNAN (1999)

Inhibition of neutrophil derived lysosomal enzymes and reactive oxygen species by a novel tetrapeptide

Inflammation Res. 48, 479 – 484

MEIER-EWERT, H. K.; RIDKER, P. M.; RIFAI, N.; PRICE, N.; DINGES, D. F.; MULLINGTON, J. M. (2001)

Absence of diurnal variation of C-reactive protein concentrations in healthy human subjects

Clin. Chem. 47; 426 – 430

MENDLER, M., EICH-BENDER, S. G., VAUGHAN, L., WINTERHALTER, K. H., BRUCKNER, P. (1989)

Cartilage contains mixed fibrils of collagen types II, IX and XI

J. Cell Biol. 108, 191 – 197

MIDDLETON, J. F., TYLER, J. A. (1992)

Upregulation of insulin-like growth factor I gene expression in the lesions of osteoarthritic human articular cartilage.

Ann Rheum Dis. Apr; 51(4), 440 - 447.

MIOSGE, N.; HARTMANN, M, MAELICKE, C.; HERKEN, R. (2004)

Expression of collagen type I and type II in consecutive stages of human osteoarthritis

Histochem Cell Biol. Sep; 122(3), 229 - 236.

MOLLENHAUER, J. A.; ERDMANN, S. (2002)

Introduction: molecular and biomechanical basis of osteoarthritis

Cell. Mol. Life Sci. 59, 3 - 4

MORGAN, J. P.; POOL, R. R. (1987)

Primary degenerative joint disease of the shoulder in a colony of beagles

J. Am. Vet. Assoc. 190, 531

MUIR, H. (1995)

The chondrocyte, architect of cartilage

BioEssays 17, 1039 – 1048

NAKATA, K. (1993)

Osteoarthritis associated with mild chondrodysplasia in transgenic mice expressing  $\alpha 1$  (IX) collagen chains with central deletion

Proc. Natl. Acad. Sci. USA, 90, 2870 – 2874

NALBANT, S.; MARTINEZ, J. A.; KITUMNUAYPONG, T.; CLAYBURNE, G.; SIECK, M.; SCHUHMACHER, H. R. (2003)

Synovial fluid features and their relations to osteoarthritis severity: new findings from sequential studies

Osteoarthritis Cartilage 11, 50 - 54

NAUSEFF, W. M.; McCORMICK, S. J.; CLARK, R. A. (1995)

Calreticulin functions as a molecular chaperone in the biosynthesis of myeloperoxidase

J. Biol. Chem. 270 (9), 4741 – 4747

NEVE, J.; PARJI, N.; MOGUILAEVSKY, N. (2001)

Inhibition of the myeloperoxidase chlorinating activity by non steroidal anti-inflammatory drugs investigated with a human recombinant enzyme

Europ. J. Pharm 417, 37 – 43

NIAMS

National Institute of Arthritis and Musculoskeletal and Skin Diseases

[www.niams.nih.gov](http://www.niams.nih.gov)

NICKEL, R., SCHUMMER, A., SEIFERLE, E. (1992)

Lehrbuch der Anatomie der Haustiere

Berlin, Hamburg, Paul Parey, 215 – 220

NOTOYA, K.; JOVANOVIC, D. V.; REBOUL, P., MARTEL-PELLETIER, J., MINEAU, F.;  
PELLETIER, J. P. (2000)

The induction of cell death in human osteoarthritis chondrocytes by nitric oxide is related to the production of prostaglandin E2 via the induction of cyclooxygenase-2

J Immunol. Sep 15; 165(6), 3402 - 3410

NURCOMBE, H.L.; BUCKNALL, R. C.; EDWARDS, S. W. (1991)

Activation of the neutrophil myeloperoxidase-H<sub>2</sub>O<sub>2</sub> system by synovial fluid isolated from patients with rheumatoid arthritis

Ann. Rheum. Dis. 50, 237 – 242

OHTA, S.; IMAI, K.; YAMASHITA, K.; MATSUMOTO, T.; AZUMANO, I.; OKADA, Y.  
(1998)

Expression of matrix metalloproteinase 7 (matrilysin) in human osteoarthritic cartilage

Lab. Invest. Jan; 78(1), 79 - 87.

OKAMURA, J. M.; MIYAGI, J. M.; TERADA, K.; HOKAMA, Y. (1990)

Potential clinical applications of C reactive protein

Journal of Clinical Laboratory Analysis 4, 231 – 235

OETTMEIER, R., ABENDROTH, K. (1989)

Osteoarthritis and bone: osteologic types of osteoarthritis of the hip

Skeletal Radiol. 18, 165 – 74

OTABE, K.; SUGIMOTO, T.; JINBO, T.; HONDA, M.; KITAO, S.; HAYASHI, S.; SHIMUZU, M.; YAMAMOTO, S. (1998)

Physiological levels of C-reactive protein in normal canine sera

Vet. Res. Com. 22, 77 – 85

PEDERSEN, N. C. (1978)

Synovial fluid collection and analysis

Vet. Clin. North Am. 8, 495 – 499

PEDERDERSEN, N.C.; POLL, R. R., MORGAN, J. P. (1989)

Joint diseases in dogs and cats

In: Ettinger. S. J. Textbook of veterinary internal medicine Bd. 3: Disease of the dog and cat

Philadelphia, London, Saunders, 263 - 277

PELLETIER, J.P., MARTELL-PELLETIER, J., GHANDUR-MNAYMNEH, L., HOWELL, D.S., WOESSNER, J.F. (1985)

Role of synovial membrane inflammation in cartilage matrix breakdown in the pond – nuki dog model of osteoarthritis

Arth and Rheum 28 (5), 554 – 561

PELOSCHEK, P. L.; SAILER, J.; KAINBERGER, F.; BOEGL, K.; IMHOFF, H. (2000)

Radiologische Quantifizierung von Gelenksveränderungen- Ein methodischer Überblick

Radiologe 40, 1154 – 1162

PERMAN, V.; CORNELIUS, G. E. (1971)

Synovial fluid

In KANEKO, J. J.; CORNELIUS, G. E. (Hrsg.)

Clinical biochemistry of domestic animals 2 ed.

Vol. II, New York, Academic Press, 143 – 149

PETRIDES, P. E.(1998)

Binde- und Stützgewebe

In : LÖFFLER, G., PETRIDES, P. E.: Biochemie

Springer Verlag, Berlin Heidelberg, New York, 6. Aufl.,733 – 760

PETRIDES, P. E.(1998)

Blut

In : LÖFFLER, G., PETRIDES, P. E.: Biochemie

Springer Verlag, Berlin Heidelberg, New York, 6. Aufl.,879 – 947

POOLE, C. A., FLINT, M. H., BEAUMONT, B. (1987)

Chondrons in cartilage: Ultrastructural analysis of pericellular microenviroment in adult human articular cartilages

J. Orthop. Res. 5, 509 – 512

POOLE, C.A. (1993)

The structure and function of articular cartilage matrix

In Woessner, J.F., u. D.S. HOWELL

Joint cartilage degeneration

New York, Marcel Dekker, 121

POOLE, A. R., KOJIMA, T., YASUDA, T., MWALE, F., KOBAYASHI, M., LAVERTY, S. (2001)

Composition and structure of articular cartilage-A templete for tissue repair

Clin. Orthop. Res. 319, 26 – 33

RADIN, E. L., PAUL, I. L. (1970)

Does cartilage reduce sceletal impact loads? The relative forceattenuading properties of articular cartilage, synovial fluid, periarticular soft tissue and bone

Arth. Rheum. 13, 139 - 148

RADIN, E. L., PAUL, J. L., LOWRY, M. (1970b)

A comparison of the dynamic force transmitting properties of subchondral bone and articular cartilage

J. Bone Joint Surg. Am. 52, 444 – 463

RADIN, E. L., ROSE, R. M. (1986)

Role of the subchondral bone in the initiation and progression of cartilage damage

Clin. Orthop 213, 34 – 40

RALPHS, J. R.; BENJAMIN, M. (1993)

The joint capsule: Structure, composition, aging and disease

J. Anat. 184, 503 – 523

READ, R. A., ARMSTRONG, S. J., O'KEEFE, L., EGER, C. E. (1990)

Fragmentation of the medial coronoid process of the ulna in dogs. A study of 109 cases

J. Small. Anim. Pract.31, 330 – 334

RENY, J. L.; VUAGNAT, A.; RACT, C.; BENOIT, M. O.; SAFAR, M.; FAGON, J. Y. (2002)

Diagnosis and follow-up of infections in intensive care patients: value of C-reactive protein compared with other clinical and biological variables.

Crit Care Med. Mar; 30(3), 529 - 535.

REPO R. U.; FINLEY, J. B. (1977)

Survival of articular cartilage after controlled impact.

J Bone Joint Surg Am; 59(8), 1068 - 1076.

REVELL PA, MAYSTON V, LALOR P, MAPP P. (1988)

The synovial membrane in osteoarthritis: a histological study including the characterisation of the cellular infiltrate present in inflammatory osteoarthritis using monoclonal antibodies.

Ann Rheum Dis. 1988 Apr; 47(4), 300 - 307

ROBERTS, R. E. (1983)

Radiographic examination of the musculoskeletal system

Vet. Clin. North Am. Small Anim. Pract. 13, 19 – 21

ROBEY F.A.; JONES K. D.; STEINBERG A. D. (1985)

C-reactive protein mediates the solubilization of nuclear DNA by complement in vitro

J Exp Med. Jun 1; 161(6), 1344 - 1356.

SALTER, D.M. (1993)

Tenascin is increased in cartilage and synovium from arthritic knees.

Br J Rheumatol. Sep; 32(9), 780 -786

SAWYER, T. (1963)

Synovial Fluid analysis of canine joints

J. Am. Vet. Med. Assoc. 143, 603 - 612

SAXNE, T.; LINDELL, M.; MANSSON, P.; PETERSSON, I. F.; HEINGARD, D. (2003)

Inflammation is a feature of the disease process in early knee joint osteoarthritis.

Rheumatology (Oxford); 42(7), 903f

SCOTT, L. J.; RUSSEL, G. J.; NIXON, N. B.; DAWES, P. T.; MATTEY, D. L. (1999)

Oxidation of alpha 1-proteinase inhibitor by the myeloperoxidase-hydrogen peroxidase system promotes binding to the immunoglobulin A

Biochem. Biophys. Res. Commun. 24; 255 (3), 562 – 567

SCHILLER, J., ARNOLD, J., SONNTAG, K., ARNOLD, K. (1996)

NMR studies on human pathologically changed synovial fluids role of hypochloric acid

Magn. Reson. Med. 35, 848 – 853

SCHMIDT, R. E., BURKHARDT, H. (2001)

Biomechanische Eigenschaften von Bindegewebe

In: SIEGENTHALER, W.:

Klinische Pathophysiologie

Thieme Verlag, 8. Aufl., Kap. 35, 978 – 990

SCHULZ, I. C.; DÄMMRICH, K. (1991)

Gelenke

In: Pathologie der Haustiere. Teil 1 Organveränderungen

SCHULZ, I.C. (Hrsg)

Gustav Fischer Verlag, Jena, 727 - 757

SHARIF, M.; SHEPSTONE, L.; ELSON, C. J.; DIEPPE, P. A.; KIRWAN, J. R. (2000)

Increased serum C reaktive Protein may reflect events that precede radiographic progression in osteoarthritis of the knee

Ann. Rheum. Dis, 59, 71 – 74

SHEIKH, J.; Park, L.; KONOP, R.; VALACER, D.; PALLARES, D.; BALLOW, M. (2002)

Myeloperoxidase deficiency

[www.emedicine.com](http://www.emedicine.com)

SIMKIN, P.A. (2001)

Synovial physiology in the context of osteoarthritis

In: BRANDT, K.D., DOHERTY, M., LOHMANDER,L.S. (Hrsg)

Osteoarthritis

Oxford, New York, Tokyo, Oxford University Press, 155 – 161

SHLOPOV, B. V.; LIE, W. R.; MAINARDI, C. L.; COLE, A. A.; CHUMBINSKAY, S.; HASTY, K.A. (1997)

Osteoarthritic lesions: involvement of three different collagenases.

Arthritis Rheum. Nov; 40(11), 2065 - 2074.

SMITH, G. K. (1997)

Advances in diagnosing canine hip dysplasia

J. Am. Vet. Med. Assoc. 210, 1451 – 1457

SOWERS, M., JANNAUSCH, M.; STEIN, E.; JAMADAR, D.; HOCHBERG, M.; LACHANCE, L. (2002)

C-reactive protein as a biomarker of emergent osteoarthritis

OsteoarthritisCartilage 10; 595 – 601

SAWYER, D. C. (1963)

Synovial Fluid analysis of canine joints

J Am Vet Med Assoc 15; 143, 609 – 612

SPECTOR, T. D.; HART, D. J.; NANDRA, D. (1997)

Low-level increases in serum C-reactive protein are present in early osteoarthritis of the knee and predict progressive disease

Arth Rheum, 40, 723 – 733

SPELLMEYER, K. (2003)

Myeloperoxidase-Aktivität im Serum und in der Synovia bei Hunden mit Osteoarthritis- Eine prospektive Studie

Berlin, Freie Univ., Diss.

STOCKWELL, R. A. (1979)

Biology of cartilage cells

Vol.7 London, Cambridge University press

STÜRMER, T.; BRENNER, H.; KÖNIG, W.; GÜNTHNER, K.-P. (2004)

Severity and extent of osteoarthritis and low grade systemic inflammation as assessed by high sensitivity C reactive protein

Ann. Rheum. Diss. 63; 200 – 205

SVALASTOGA, E.; REIMANN, I. (1985)

Experimental osteoarthritis in the rabbit. I. Histological changes in the synovial membrane

Acta Vet. Scand. 26, 313 – 325

TETLOW, L. C.; WOOLLEY, D. E. (2001)

Expression of vitamin D receptors and matrix metalloproteinases in osteoarthritic cartilage and human articular chondrocytes in vitro.

Osteoarthritis Cartilage. Jul; 9(5), 423 - 431.

THOMPSON, R. C.; OEGEMA, T. R.; LEWIS, J. L.; WALLACE, L. (1991)

Osteoarthritic changes after acute transarticular load: an animal model

J. Bone Joint Surg. 73A, 990 – 1001

TILLET, W. S., FRANCIS, T. Jr.(1930)

Serologie reactions in pneumonia with a non-protein somatic fraction of pneumococcus. J Exp Med 52, 561-571.

TODHUNTER, R. J. (1996)

Anatomy and physiology of synovial joints

In Joint disease of the horse

Hrsg.: Mc ILLWRITH, C. W.; TROTTER, G. W.

W.B. SAUNDERS Company, Philadelphia, London 1- 28

TORSTEINDOTTIR, I.; HAKANSSON, L. ; HÄLLGREN, R.; GUDBJÖRNSSON, B.; ARVIDSON, N. G. ; VENGR, P. (1999)

Serum lysozym : a potential marker of monocyte/macrophage activity in rheumatoid arthritis

Rheum. 38, 1249 – 1254

TRIPPEL, C. B. (1990)

Articular cartilage research

Curr. Opin. Rheumatol. 2(5), 777 – 782

URBAN, J. P. G. (1994)

The chondrocyte: a cell under pressure

Br. J. Rheumatol. 33, 901 – 908

VAN BREE, H., DEGRYSE, H., VAN RYSSEN, B. (1993)

Pathologic correlations with magnetic resonance images of osteoarthritis lesions in canine shoulder

J. Am. Vet. Med. Assoc. 202, 1099

VAN BREE, H. (1995)

Imaging the canine elbow: Radiography, computed tomography and arthroscopy

Vet. Annual 35, 118

van BEUNINGEN, H. M., GLANSBEEK, H. L.; van der KRAAN, P. M.; van den BERG, W. B. (2000)

Osteoarthritis-like changes in the murine knee joint resulting from intra-articular transforming growth factor-beta injections.

Osteoarthritis Cartilage. Jan; 8(1), 25 - 33.

VAN DEN BERG, W.B., VAN DER KRAAN, P.M., VAN BEUNINGEN, H.M. (2001)

Synovial mediators of cartilage damage and repair in osteoarthritis

In: BRANDT, K.D., DOHERTY, M., LOHMANDER,L.S. (Hrsg)

Osteoarthritis

Oxford, New York, Tokyo, Oxford University Press, 147 – 155

van OSCH, G. J.; van der VEEN, S. W.; BUMA, P.; VERWOERD-VERHOEF, H. L.(1998)

Effect of transforming growth factor-beta on proteoglycan synthesis by chondrocytes in relation to differentiation stage and the presence of pericellular matrix

Matrix Biol. Oct; 17(6), 413 - 424.

VILALTA, C.; NUNEZ, M., SEGUR, J. M.; DOMINGO, A.; CARBONELL, J. A.; MACULE, F. (2004)

Knee osteoarthritis: interpretation variability of radiological signs

Clinical Rheum 10.007/s100667-004-0934-3; www.springerlink.metapress.com  
(aufgerufen am 18.11.2004)

VIEHMANN, B.(1998)

Zur Diagnostik der Ellenbogengelenksdysplasie beim Hund: Standardröntgen,  
Feinfokusröntgen und computergestützte Auswertung

Berlin, Freie Univ., Vet. Med. Diss.

WEISS, S. (1989)

Tissue destruction by neutrophils

New England J. Med. 320, 365 – 371

WESTACOTT, C. I.; TAYLOR, G.; ATKINS, R.; ELSON, C. (1992)

Interleukin 1 alpha and beta production by cells isolated from membranes around  
aseptically loose total joint replacements.

Ann Rheum Dis. May; 51(5), 638 - 642

WINTERBOURNE, C. C.; KETTLE, A. J. (2003)

Radical-radical reactions of superoxide: a potential route to toxicity

Biochem. Biophys., 338, 15 – 21

WINTERBOURNE, C. C.; KETTLE, A. J. (2004)

Reactions of superoxide with myeloperoxidase and its products

Jpn. J. Infect. Dis., 57, 31 – 33

WÖLK, U. (2001)

Kollagenverteilung in osteoarthritischen Gelenken

Diss. Vet. Med, Berlin

YAEGER, P. C.; MASI, T. L., de ORTIZ; J.L.; BINETTE, F, TUBO, R.; McPHERSON, J.  
M. (1997)

Synergistic action of transforming growth factor-beta and insulin-like growth factor-  
I induces expression of type II collagen and aggrecan genes in adult human  
articular chondrocytes.

Exp Cell Res. Dec 15; 237(2), 318 - 325.

YAMAMOTO, S. T.; TAGATA, H.; NAGHATA, Y.; ISHIKAWA, M.; MORIMATSU, M.;  
NAIKI, M. (1992)

Isolation of canine C-reactive protein and characterisation of its properties

Vet. Immunol. Immunopathol. 30, 329 – 339

YAMAMOTO, S.; SHIDA, T.; MIYAJI, S.; SANTSUKA, H.; FUJISE, H.; MUKAWA, K.; FURUKAWA, E.; NAGAE, T.; NAIKI, M. (1993)

Changes in Serum C-reactive protein levels in dogs with various disorders and surgical traumas

Vet. Res. Comm. 17, 85 – 93

YAMAMOTO, S.; SHIDA, T.; OKIMURA, T.; OTABE, K.; HONDA, M.; ASHINDA, Y.; FURUKAWA, E.; SARIKAPUTI, M.; NAIKI, M. (1994)

Determination of C reactive protein in serum and plasma from healthy dogs and dogs with pneumonia by ELISA and slide reversed passive latex agglutination test.

Vet. Q. 16, 74 – 77

YANG, X.; CHEN, L.; XU, X.; LI, C.; HUANG, C.; DENG, C. X. (2001)

TGF-beta/Smad3 signals repress chondrocyte hypertrophic differentiation and are required for maintaining articular cartilage.

J Cell Biol. 2001 Apr 2;153(1):35-46.

YARBROUGH, J. B., SNYDER, J. R., HARMON, F. A., O'CONNEL, K.A. (1994)

Evaluation of myeloperoxidase concentrations in experimentaly induced equine colonic ischaemia and reperfusion

Equine Vet. J. 26, 67 – 69

ZABUCCHI, G.; SORANZO, M.R.; MENEGAZZI, R.; BERTONCIN, P.; NARDON, E.; PATRIACARA, P. (1989)

Uptake of human eosinophil peroxidase and myeloperoxidase by cells involved in the inflammatory process

J. Histochem. Cytochem. 37(4), 499 – 508