

Abwehrzellen

Eosinophilie

Abwehrzellen MedizinInfo <http://www.medizininfo.de/immunsystem/abwehr/abwehrzellen.htm>

Haupt-Ursache einer Eosinophilie sind **Allergien (Atopie)**, speziell IgE-bedingte allergische Reaktionen.

Weitere Ursachen sind **Parasiten** (z. B. Leberegel, Nematoden [Therapie: Pyrantel (z. B. Helmex®), Albendazol (z. B. Eskazole®), Mebendazol (z. B. Vermox®) oder Pyrviniumpamoat (z.B. Movelac®)] oder Ektoparasiten), **Pilze** oder **Fremdkörper** oder **Neoplasien** z.B. Mastzelltumore (selten auch Lymphome).

Oft wird (oder wurde) eine Eosinophilie aber auch als ein Anzeichen von beginnender Genesung angesehen („**die Morgenröte der Genesung**“).

Multiple-Allergie wird als Multiple Chemical Sensitivity - auch als MCS bezeichnet - oder auch als chemische Verletzung, Chemical Sensitivity, als eine Umweltkrankheit.

Jede allergische Krankheit ist verursacht durch eine spezifische Infektion sive Intoxikation. [BDH](#)

Main cause of eosinophilia are **allergies (atopy)**, especially IgE-related allergic reactions.

Other causes include **parasites** (eg, liver fluke, nematode [Therapy: pyrantel (for B.Helmex®), albendazole (eg Eskazole®), mebendazole (Vermox®, for example) or Pyrviniumpamoat (eg Movelac)] or **ectoparasites**), **fungi** or **foreign bodies** or **neoplasia** eg. Mast cell tumors (rarely lymphomata).

Oftentimes eosinophilia is (or had been) also seen as a sign of incipient recovery ("**the dawn of recovery**").

Multiple allergy is called Multiple Chemical Sensitivity - also known as MCS - or as chemical injury, chemical sensitivity, as an environmental illness (EI).

Quelle, source: <http://de.wikipedia.org/wiki/Eosinophilie>

Maitland A (2014) **Few or No Allergies but still reacting.** <http://ctins.org/Mast-Cell-Activation-Disorder.pdf>

Every allergic disease is a specific infection, or correspondingly an intoxication. [BDH](#)

Immunosystem

Bluth MH (2007), Commins SP (2009), Van Nunen SA (2009), Erwin EA (2009), Burke G (2010), Commins SP (2011), Reiter A (2011), Wolver SE (2012), Buda P (2015)

Viruses

Wedi B (2009)

Bacteria

Benach JL (1986), Vichova B (2014), Minciullo (2014)

Nematodes, Filarien

González-Miguel J (2010), Czajka C (2014)

Toxins

Albert A (1987)

Huismans H. (1979) **Tierische Parasiten des menschlichen Auges**. Bücherei des Augenarztes ENKE Heft 80 <http://katalog.ub.uni-heidelberg.de/cgi-bin/titel.cgi?katkey=66347375>

[Benach JL](#), [Gruber BL](#), [Coleman JL](#), [Habicht GS](#), [Golightly MG](#). (1986) An **IgE response** to spirochete antigen in patients with **Lyme disease**. *Zentralbl Bakteriol Mikrobiol Hyg A*. 263(1-2), 127-32. <http://www.ncbi.nlm.nih.gov/pubmed/2437736>

Albert A (1987) **Xenobiosis. Food, drugs and poisons in the human body**. <http://www.amazon.de/Xenobiosis-Food-Drugs-Poisons-Human/dp/B0093XTUZG>
<http://trove.nla.gov.au/work/12678198?q=+&versionId=45645960>

Van Wye JE, Hsu Y, Terr AI, Moss RB, Lane RS. (1991) **Anaphylaxis from a tick bite**. *N Engl J Med*. 324, 777–8. [[PubMed](#)]

Beaudouin E, Kanny G, Guerin B, Guerin L, Plenat F, Moneret-Vautrin DA. (1997) Unusual manifestations of hypersensitivity after a **tick bite**: report of two cases. *Ann Allergy Asthma Immunol*. 79, 43–6. [[PubMed](#)]

[Bluth MH](#), [Robin J](#), [Ruditsky M](#), [Norowitz KB](#), [Chice S](#), [Pytlak E](#), [Nowakowski M](#), [Durkin HG](#), [Smith-Norowitz TA](#). (2007) **IgE anti-Borrelia burgdorferi components** (p18, p31, p34, p41, p45, p60) and increased blood CD8+CD60+ T cells in children with **Lyme disease**. *Scand J Immunol*. 65(4), 376-82. <http://www.ncbi.nlm.nih.gov/pubmed/17386029>
<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3083.2007.01904.x/full>

[Ehrhardt, S](#); [Burchard, G D](#) (2008) Eosinophilia in Returning Travelers and Migrants. *Dtsch Arztebl Int* 105(46), 801-7; DOI: 10.3238/arztebl.2008.0801
<http://www.aerzteblatt.de/archiv/62367/Eosinophilie-bei-Tropenrueckkehrern-und-Migranten>

Commins SP, Satinover SM, Hosen J, Mozena J, Borish L, Lewis BD, et al. (2009) **Delayed anaphylaxis, angioedema, or urticaria after consumption of red meat in patients with IgE antibodies specific for galactose- α -1,3-galactose**. *J Allergy Clin Immunol*. 123, 426–33. [[PMC free article](#)] [[PubMed](#)]

Van Nunen SA, O'Connor KS, Clarke LR, Boyle RX, Fernando SL. (2009) **An association between tick bite reactions and red meat allergy in humans**. *Med J Australia*. 190, 510–1. [[PubMed](#)]

Erwin EA, Hosen J, Pollart SM, Reid MJ, Platts-Mills TA. (2009) High-titer IgE antibody specific for pollen allergens in northern California associated with both wheezing and total serum IgE. *J Allergy Clin Immunol*. 123, 706–8. [[PMC free article](#)] [[PubMed](#)]

Wedi B, Rapp U, Wioczorek D, Kapp A (2009) **Urticaria and infections**. *Allergy Asthma Clin Immunol*. 5(1), 10 doi: [10.1186/1710-1492-5-10](https://doi.org/10.1186/1710-1492-5-10)

Burke G, Wikel SK, Spielman A, Telford SR, McKay K, Krause PJ, et al. (2010) **Hypersensitivity to ticks and Lyme disease risk**. *Emerg Infect Dis*. 2005 Jan; serial on the Internet. accessed December 2010. [[PMC free article](#)] [[PubMed](#)]

[González-Miguel J](#), [Rosario L](#), [Rota-Nodari E](#), [Morchón R](#), [Simón F](#). (2010) Identification of immunoreactive proteins of **Dirofilaria immitis** and **D. repens** recognized by sera from patients with pulmonary and subcutaneous dirofilariasis. *Parasitol Int*. 59(2), 248-56. doi: 10.1016/j.parint.2010.02.010. <http://www.ncbi.nlm.nih.gov/pubmed/20197111>

Ring J, Plötz, S (2010) **Virusinfekt, (Pseudo-)Allergie oder Autoimmunerkrankung? Nesselsucht: Gehen Sie der Ursache auf den Grund**. *MMW-Fortschr. Med* 38, 152.Jg. „Eine [infekt assoziierte] Eradikationstherapie ist Bestandteil des „Münchener Schemas“ (nach Braun-Falco): Tetracyclin + Antimykotikum + Antihelminthikum + Probiotika. In: Ring J (2004) Allergische Erkrankungen mit möglicher IgE-Beteiligung. Urticaria und Quincke-Ödem. In Ring J eds.:

Angewandte Allergologie. Medizin und Wissen. Urban und Vogel Medien und Medizin
Verlagsgesellschaft, München 128-137

[Commins SP](#), [James HR](#), [Kelly EA](#) (2011) The relevance of tick bites to the production of IgE antibodies to the mammalian oligosaccharide galactose- α -1,3-galactose. *J Allergy Clin Immunol.* 127(5), 1286–1293.e6. . doi: [10.1016/j.jaci.2011.02.019](https://doi.org/10.1016/j.jaci.2011.02.019) PMID: PMC3085643 NIHMSID NIHMS273885 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3085643/>

Reiter A, Goede J, Metzgeroth G, Sperr WR, Valent P (2011) Eosinophilie - assoziierte **Myeloproliferative Erkrankungen** (MPN-Eo) <http://www.dgho-onkopedia.de/de/onkopedia/leitlinien/eosinophilie-assozierte-myeloproliferative>

Labor 28 (2011) Differenzialdiagnose der Eosinophilie. <http://www.labor28.de/pdf/laborinfo/194-Eosinophilie.pdf>

Sims H, Erber WN (2012) **Diagnostik beim Zufallsbefund Eosinophilie**. Minireview BJJ Rational Testing 101(2), 123-125 <http://www.biham.unibe.ch/unibe/medizin/biham/content/e7950/e9805/e9879/linkliste63636/DiagnosebeimZufallsbefundEosinophilie.pdf>

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Zur Hausen H (2012) **Red meat consumption and cancer: Reasons to suspect involvement of bovine infectious factors in colorectal cancer**. *International Journal of Cancer* [130\(11\)](https://doi.org/10.1002/ijc.22833), 2475–2483

Tick Allergy. (2014) Australian society of clinical immunology and allergy. ASCIA PCC Tick allergy 2014347.24 KB <http://www.allergy.org.au/patients/insect-allergy-bites-and-stings/tick-allergy> http://www.allergy.org.au/images/pcc/ASCIA_PCC_Tick_allergy_2014.pdf

Czajka C, Becker N, Joest H, et al. (2014) Stable transmission of **Dirofilaria repens nematodes**, northern Germany. *Emerg Infect Dis.* 20(2), 328-31 <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3901495/>

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[Minciullo PL](#), [Cascio A](#), [Barberi G](#), [Gangemi S](#). (2014) **Urticaria and bacterial infections**. *Allergy Asthma Proc.* <http://www.ncbi.nlm.nih.gov/pubmed/24857191>

„Many bacterial infections have been associated with urticaria manifestation, such as *Helicobacter pylori*, *Streptococcus*, *Staphylococcus*, *Mycoplasma pneumonia*, *Salmonella*, *Brucella*, *Mycobacterium leprae*, *Borrelia*, *Chlamydia pneumonia*, and *Yersinia enterocolitica*. In some cases the skin manifestations, described as urticaria, could be caused by the presence of the microorganism in the skin, or for the action of their toxins, or to the complement activation mediated by circulating immune complexes. Although only a weak association with urticaria of unclear pathogenesis exists, clinicians should consider these bacterial agents in the workup of the patients with urticaria. The eradication of the infection could, in fact, lead to the resolution of urticaria.“

Sujata P. Thawani, Thomas H. Brannagan III, Benjamin Lebwohl, Peter H. R. Green, Jonas F. Ludvigsson. (2015) **Risk of Neuropathy Among 28 232 Patients With Biopsy-Verified Celiac Disease**. *JAMA Neurology*, published online May 11, 2015, doi:10.1001/jamaneurol.2015.0475

[Buda P](#), [Zawadka K](#), [Wadowska-Kłopotek W](#) et al. (2015) **Cerebrospinal fluid eosinophilia in a child with neuroborreliosis**. *Wiad Lek.* 68(1), 92-4. <http://www.ncbi.nlm.nih.gov/pubmed/26094340>

Ascaris suum, Schweinespulwurm. Literaturübersicht. http://www.diss.fu-berlin.de/diss/servlets/MCRFileNodeServlet/FUDISS_derivate_00000003278/03_litue.pdf;jsessionid=5222639803E29100D3010D45E2D2A4EB?hosts=

Toxocara canis, Hundespulwurm.

<http://www.meduniwien.ac.at/Tropenmedizin/downloads/downloads/SteckbriefToxokarose.pdf>

- Mikrofilarien <http://www.xerlebnishaft.de/mikrofilarien.pdf>
- Fadenwurminfektionen http://de.wikipedia.org/wiki/Fadenwurminfektionen_des_Hundes
- Hundehautwurm in Stechmücken gefunden <http://m.aerzteblatt.de/print/144674.htm>
http://www15.bni-hamburg.de/bni/bni2/neu2/inc/news/news_pdffiles/2013/PM-BNI_Filarie-Muecke_130709.pdf
- Infektion mit Zwergfadenwurm <http://www.med1.de/Laien/Krankheiten/Tropen/Wuermer/Zwergfadenwurm/>
- Würmer (Helminten) <http://www.med1.de/Laien/Krankheiten/Tropen/Wuermer/#p03>
- Saugwürmer (Trematoden) Leberegel <http://de.wikipedia.org/wiki/Saugw%C3%BCrmer>
<http://de.wikipedia.org/wiki/Leberegel> <http://de.wikipedia.org/wiki/Dicrocoeliose> [Medikament: Praziquantel = Biltricide (D), Cesol (D), Cysticide (D)]
- Cave Epilepsie durch Infektion mit Toxocara canis [Medikament: Thiabendazol]

- Fungi, Pilze als Toxin-Bildner <http://www.xerlebnishaft.de/amphibiensterben.pdf>
- Fungi, Pilze als Zwischenwirte <http://www.kabilahsystems.de/fluconazol.pdf>
- Physiologische Pilz-Reduktion <http://www.kabilahsystems.de/ungesaettfets.pdf>

- Xenobiotika Albert A (1987) Xenobiosis. Food, drugs and poisons in the human body.
<http://www.amazon.de/Xenobiosis-Food-Drugs-Poisons-Human/dp/B0093XTUZG>
<http://trove.nla.gov.au/work/12678198?q=+&versionId=45645960>

Mangantransport Blockade

Ouyang Z et al. (2009) **A manganese transporter, BB0219 (BmtA), is required for virulence by the Lyme disease spirochete, Borrelia burgdorferi.** Proc Natl Acad Sci U S A. 106(9), 3449-54. <http://www.ncbi.nlm.nih.gov/pubmed/19218460>

Mangan-Transport-Blockade bei Borrelien durch das Antihistaminicum **Loratadin** (z.B. Claritin®)

Mast Cell Activation Disorder (MCAD)

„Die physiologischen Funktionen von Mastzellen liegen vor allem in der Abwehr von Bakterien und Parasiten sowie im Schutz vor Tiergiften.“ Quelle: <https://de.wikipedia.org/wiki/Mastzelle>

- Biologie-Schule Mastzelle <http://www.biologie-schule.de/mastzelle.php>
- Mastzellaktivierungs Info <http://www.mastzellaktivierung.info/de/diagnose.html#probatorisch>

Wallace M, Mascola J, Oldfiels EC III (1991) **Red-man syndrome: Incidence, etiology, and prophylaxis.** J Infect Dis 164(6), 1180-1185. [View Article](#) [PubMed](#) [Google Scholar](#)
<https://www.ncbi.nlm.nih.gov/pubmed/1955716>

Sivagnanam S, Deleu D (2002) Commentary **Red man syndrome.** Critical Care 7, 119
<https://doi.org/10.1186/cc1871> <https://ccforum.biomedcentral.com/articles/10.1186/cc1871>

Metz M, Piliponsky AM, Chen ChCh, Lammel V, Åbrink M (2006) **Mast Cells Can Enhance Resistance to Snake and Honeybee Venoms.** Science. 313(5786), 526-30., [ISSN 0036-8075](#), S.526–530, [doi:10.1126/science.1128877](https://doi.org/10.1126/science.1128877), [PMID 16873664](https://pubmed.ncbi.nlm.nih.gov/16873664/) (sciencemag.org)
<https://www.ncbi.nlm.nih.gov/pubmed/16873664>

„Mast cells also significantly reduced the morbidity and mortality induced by honeybee venom. These findings identify a new biological function for mast cells in enhancing resistance to the morbidity and mortality induced by animal venoms.“

Homann J, Kolck UW, Ehnes A, Frieling T, Raithel M, Molderings GJ (2010) **Die systemische Mastozytose - Standortbestimmung einer internistischen Erkrankung [Systemic mastocytosis - definition of an internal disease]**. Med Klin (Munich). 105(8), 544-53. Epub 2010 Sep 8. <http://www.ncbi.nlm.nih.gov/pubmed/20824412>

Galli SJ, Borregaard N, Wynn ThA (2011) **Phenotypic and functional plasticity of cells of innate immunity: macrophages, mast cells and neutrophils**. [Nat Immunol](#). 12(11), 1035-44. doi: 10.1038/ni.2109. S.1035–1044, [doi:10.1038/ni.2109](https://doi.org/10.1038/ni.2109), [PMID 22012443](https://pubmed.ncbi.nlm.nih.gov/22012443/), [PMC 3412172](https://pubmed.ncbi.nlm.nih.gov/3412172/) – ([nature.com](http://www.nature.com)). <https://www.ncbi.nlm.nih.gov/pubmed/22012443>

[Molderings GJ](#), [Brettner S](#), [Homann J](#), [Afrin LB](#) (2011) **Mast cell activation disease: a concise practical guide for diagnostic workup and therapeutic options**. [J Hematol Oncol](#). 4, 10. doi: [10.1186/1756-8722-4-10](https://doi.org/10.1186/1756-8722-4-10) PMID: 21418662 [PMCID: PMC3069946](https://pubmed.ncbi.nlm.nih.gov/21418662/) [PMID: 21418662](https://pubmed.ncbi.nlm.nih.gov/21418662/) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3069946/>

„Effective therapy often consists simply of antihistamines and mast cell membrane-stabilising compounds supplemented with medications targeted at specific symptoms and complications.“

Hamilton MJ, Hornick JL, Akin C, Castells MC, Greenberger NJ (2011) **Mast cell activation syndrome: a newly recognized disorder with systemic clinical manifestations**. J Allergy Clin Immunol. 2011 Jul;128(1):147-152.e2. doi: 10.1016/j.jaci.2011.04.037. <http://www.ncbi.nlm.nih.gov/pubmed/21621255>

Weng Z, Zhang B, Asadi S, Sismanopoulos N, Butcher A, Fu X, Katsarou-Katsari A, Antoniou C, Theoharides TC (2012) **Quercetin is more effective than cromolyn in blocking human mast cell cytokine release and inhibits contact dermatitis and photosensitivity in humans**. PLoS ONE. 7 (3), e33805. doi:10.1371/journal.pone.0033805. [PMC 3314669](https://pubmed.ncbi.nlm.nih.gov/22470478/) [PMID 22470478](https://pubmed.ncbi.nlm.nih.gov/22470478/)

[Frieri M](#), [Patel R](#), [Celestin J](#) (2013) **Mast cell activation syndrome: a review**. [Curr Allergy Asthma Rep](#). 13(1), 27-32. doi: 10.1007/s11882-012-0322-z. <https://www.ncbi.nlm.nih.gov/pubmed/23179866>

[Afrin LB](#) (2014) **A Concise Practical Guide to Diagnostic Assessment for Mast Cell Activation Disease**. WJH World Journal of Hematology 3.1, 155-232.

Molderings GJ, Homann J, Brettner S, Raithel M, Frieling T (2014) **Systemische Mastzell-aktivierungserkrankung: Ein praxisorientierter Leitfaden zu Diagnostik und Therapie**. [Mast cell activation disease: a concise practical guide for diagnostic workup and therapeutic options]. Dtsch Med Wochenschr. 139(30), 1523-34; quiz 1535-8. doi: 10.1055/s-0034-1370055. Epub 2014 May 6. <http://www.ncbi.nlm.nih.gov/pubmed/24801454> <https://www.thieme-connect.com/DOI/DOI?10.1055/s-0034-1370055>

[Afrin LB](#), [Pöhlau D](#), [Raithel M](#), [Haenisch B](#), [Dumoulin FL](#), [Homann J](#), [Mauer UM](#), [Harzer S](#), [Molderings GJ](#) (2015) **Mast Cell Activation Disease: An Underappreciated Cause of Neurologic and Psychiatric Symptoms and Diseases**. Brain Behav Immun. pii: S0889-1591(15)00236-6. doi: 10.1016/j.bbi.2015.07.002. <http://www.ncbi.nlm.nih.gov/pubmed/26162709>

„We describe MCAD's pathogenesis, presentation (focusing on NPS), and therapy, especially vis-à-vis neuropsychotropes. Since MCAD patients often present NPS, neurologists and psychiatrists have the opportunity, in recognizing the diagnostic possibility of MCAD, to short-circuit the often decades-long delay in establishing the correct diagnosis required to identify optimal therapy.“

[Frieri M](#) (2015) **Mast Cell Activation Syndrome**. Clin Rev Allergy Immunol. doi:10.1007/s12016-015-8487-6. [PMID 25944644](https://pubmed.ncbi.nlm.nih.gov/25944644/).

[Weinstock LB](#), [Brook JB](#), [Myers T](#), [Goodman B](#) (2018) CASE REPORT **Successful treatment of postural orthostatic tachycardia and mast cell activation syndromes using naltrexone, immunoglobulin and antibiotic treatment**. <http://casereports.bmj.com/content/2018/bcr-2017-221405.full>

Mangantransport Blockade, Manganese transport blockade

Ouyang Z et al. (2009) **A manganese transporter, BB0219 (BmtA), is required for virulence by the Lyme disease spirochete, Borrelia burgdorferi**. Proc Natl Acad Sci U S A. 106(9), 3449-54. <http://www.ncbi.nlm.nih.gov/pubmed/19218460>

Mangan-Transport-Blockade bei Borrelien durch das Antihistaminicum **Loratadin** (z.B. Claritin®)
s.a., see also <https://de.wikipedia.org/wiki/Desloratadin> (z.B. Alerius®)

Praxisrelevante Anti-Zytokine, Anti-Chemokine, anti-cytokins, anti-chemokins relevant to practice <http://www.kabilahsystems.de/antizyt-chem.pdf>

Und, and quercetin (Weidenrindenextrakt), [aspirin](#), [curcumin](#) (Tumeric, Gelbwurz, *Curcuma longa*), [H1-antihistamines](#); [cetirizine](#), [ketotifen](#), [H2-antihistamines](#); [ranitidine](#), [famotidine](#).
Quelle, source of origin: https://en.wikipedia.org/wiki/Mast_cell_activation_syndrome#Treatment

Pflanzliche Lock- und Abwehrstoffe <http://www.kabilahsystems.de/phytotherapie.pdf>

➔ **Herxheimer Jarisch Reaktion** <http://www.kabilahsystems.de/herxh.pdf>

[Bernt - Dieter Huismans](#) Letzte Revision April 2018 www.Huismans.click
Back to top: <http://www.xerlebnishaft.de/eosinophilie.pdf>

