

BioMedLib Review

Review article

'Pharmacologic Substances' associated with 'Unspecified Juvenile Rheumatoid Arthritis': Top Publications.

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Abstract

Background: There are articles published each month which present 'pharmacologic substance or antibiotic or clinical drug' for 'unspecified juvenile rheumatoid arthritis'. Finding such articles is important for researchers, clinicians, and patients. However these articles are spread across thousands of journals, and there are many types of 'pharmacologic substance or antibiotic or clinical drug'. This makes searching and locating the relevant publications a challenge. We have used BioMedLib's semantic search technology to address the issue, and gathered all the pertinent publications in this review article.

Methods: We categorized the publications we found into two groups. We used the strength of textual-association to separate the groups. In group one there are publications with the strongest evidence of association. We focused finding the most relevant publications pertinent to our goal, rather than combining them into a conclusion section. Such textual synthesis will be the focus of our next project.

Results: Group one includes 32 publications, and group two 14040 publications. Here are the top 10. **Bond A et al:** The relationship between exposed galactose and N-acetylglucosamine residues on IgG in rheumatoid arthritis (RA), juvenile chronic arthritis (JCA) and Sjögren's syndrome (SS). **Gibson DS et al:** Vitamin D binding protein isoforms as candidate predictors of disease extension in childhood arthritis. **landashevskaja SI et al:** [Amyloidosis in children with rheumatoid arthritis and the results of its long-term treatment with colchicine]. **Aghighi Y et al:** Efficacy of methylprednisolone pulse therapy in children with rheumatoid arthritis. **lakovleva AA et al:** [Experience with use of cytostatic preparations in the complex therapy of rheumatoid arthritis in children]. **Shakhbazian IE et al:** [Immunosuppressive therapy of rheumatoid arthritis in children]. **Barzaghi N et al:** Salicylic acid disposition in children with rheumatoid arthritis. **Sparling M et al:** Radiographic followup of joints injected with triamcinolone hexacetonide for the management of childhood arthritis. **Shakhbazian IE et al:**

[Use of indomethacin in rheumatoid arthritis in children]. **Iakovleva AA**: [Considerations on the use of cytostatic preparations in rheumatoid arthritis in children].

Background

Definition of 'unspecified juvenile rheumatoid arthritis':

Juvenile rheumatoid arthritis (JRA) is a type of [arthritis](#) that happens in children age 16 or younger. It causes joint swelling, pain, stiffness, and loss of motion. It can affect any joint, and in some cases it can affect internal organs as well.

One early sign of JRA may be limping in the morning. Symptoms can come and go. Some children have just one or two flare-ups. Others have symptoms that never go away. JRA causes growth problems in some children.

No one knows exactly what causes JRA. Scientists do know it is an [autoimmune disorder](#), which means your immune system, which normally helps your body fight infection, attacks your body's own tissues. JRA can be hard to diagnose. Your health care provider may do a physical exam, lab tests, and x-rays. Medicines and physical therapy can help maintain movement and reduce swelling and pain.

NIH: National Institute of Arthritis and Musculoskeletal and Skin Diseases

[1]

There are articles published each month which present 'pharmacologic substance or antibiotic or clinical drug' for 'unspecified juvenile rheumatoid arthritis'. Finding such articles is important for researchers, clinicians, and patients. However these articles are spread across thousands of journals. Moreover, although it might be straightforward to search for the concept of 'unspecified juvenile rheumatoid arthritis', but there are many types of 'pharmacologic substance or antibiotic or clinical drug' which can be expressed by a myriad of terms. This makes searching and locating the relevant publications a challenge. We have used BioMedLib's semantic search technology to address the issue, and gathered all the pertinent publications in this review article.

Methods and materials

BioMedLib's semantic search: BioMedLib finds and indexes 3,431,839 unique terms which express different types of 'pharmacologic substance or antibiotic or clinical drug'. BioMedLib makes it possible to take a specific concept like 'unspecified juvenile rheumatoid arthritis' and efficiently search for all the 3,431,839 types of 'pharmacologic substance or antibiotic or clinical drug'.

Moreover, BioMedLib enables us to focus on publications which have expressed a close relationship between the 'unspecified juvenile rheumatoid arthritis' and the 'pharmacologic substance or antibiotic or clinical drug'. BioMedLib measures 'textual association' between the terms, where a publication gets a bigger association score when the terms have closer textual distance.

We used the technology described above, and then simultaneously crossed the results with other search operators, such as publication dates. This makes the resulting publications to be both 'relevant' and 'recent' at the same time. We have yet to locate other search engines capable of simultaneous 'relevant' and 'recent' searches, on both biomedical concepts and semantic types.

We categorized the publications we found into two groups. We used the strength of textual-association to separate the groups. Group two is all of the publications we could locate using the BioMedLib technology, given the range of publication dates we used for this review article. We refined group 2 and omitted some

publications with weaker evidence of association, and created group one. In group one there are publications with the strongest evidence of association. Therefore the two groups might share some of the publications.

We focused finding the most relevant publications pertinent to our goal, rather than combining them into a conclusion section. Such textual synthesis will be the focus of our next project. We welcome inquiries for collaboration regarding the next project.

Results

The groups of publications listed in this review article are also available online, where they are updated on a regular basis; see hyperlinks below.

For this review article we covered publications of 1970 to 2015. To see publications from prior years, see hyperlinks below.

Group one (more relevance) includes 32 publications. Here are the top 20.

- G1.1. Bond A, Alavi A, Axford JS, Youinou P, Hay FC: **The relationship between exposed galactose and N-acetylglucosamine residues on IgG in rheumatoid arthritis (RA), juvenile chronic arthritis (JCA) and Sjögren's syndrome (SS).** *Clin Exp Immunol*; 1996 Jul;105(1):99-103
- G1.2. Gibson DS, Newell K, Evans AN, Finnegan S, Manning G, Scaife C, McAllister C, Pennington SR, Duncan MW, Moore TL, Rooney ME: **Vitamin D binding protein isoforms as candidate predictors of disease extension in childhood arthritis.** *J Proteomics*; 2012 Sep 18;75(17):5479-92
- G1.3. Iandashevskaja SI, Iakovleva AA, Dvoriakovskaja GM, Sibiriakova LG: **[Amyloidosis in children with rheumatoid arthritis and the results of its long-term treatment with colchicine].** *Ter Arkh*; 1991;63(12):100-5
- G1.4. Aghighi Y, Attarod L, Javanmard M: **Efficacy of methylprednisolone pulse therapy in children with rheumatoid arthritis.** *Clin Rheumatol*; 2008 Nov;27(11):1371-5
- G1.5. Iakovleva AA, Fokina TV, Shkarenkova LV: **[Experience with use of cytostatic preparations in the complex therapy of rheumatoid arthritis in children].** *Vestn Akad Med Nauk SSSR*; 1972;27(12):67-70
- G1.6. Shakhbazian IE, Ulybina OV: **[Immunosuppressive therapy of rheumatoid arthritis in children].** *Vopr Revm*; 1978 Jan-Mar;(1):21-3
- G1.7. Barzaghi N, Lamedica G, Gatti G, Cottafava F, Massocco D, Marchese N: **Salicylic acid disposition in children with rheumatoid arthritis.** *Fundam Clin Pharmacol*; 1991;5(4):285-90
- G1.8. Sparling M, Malleson P, Wood B, Petty R: **Radiographic followup of joints injected with triamcinolone hexacetonide for the management of childhood arthritis.** *Arthritis Rheum*; 1990 Jun;33(6):821-6
- G1.9. Shakhbazian IE, Ulybina OV, El'iashevich V Ia: **[Use of indomethacin in rheumatoid arthritis in children].** *Pediatria*; 1974 Nov;(11):49-52
- G1.10. Iakovleva AA: **[Considerations on the use of cytostatic preparations in rheumatoid arthritis in children].** *Pediatria*; 1981 Dec;(12):27-33

- G1.11. Krasnova KN, Chenchikova EP: **[Voltaren in the treatment of children with rheumatoid arthritis]**. *Pediatr*; 1982 Dec;(12):39-42
- G1.12. Siemieńska-Rywik S, Dubrowski M, Rostropowicz-Denisiewicz K, Polakowa I: **[Naprosyn in the treatment of children with rheumatoid arthritis]**. *Pediatr Pol*; 1984 Oct;59(10):847-51
- G1.13. Melikhova NI, Klimov IuV: **[Clinical evaluation of the effectiveness of benorilate in rheumatoid arthritis in children]**. *Pediatr*; 1980;(9):52-3
- G1.14. Prieur AM, Buriot D, Lefur JM, Griscelli C: **Possible toxicity of levamisole in children with rheumatoid arthritis**. *J Pediatr*; 1978 Aug;93(2):304-5
- G1.15. Hirsch R: **Is long-term etanercept therapy safe and effective in patients with juvenile RA?** *Nat Clin Pract Rheumatol*; 2008 Dec;4(12):628-9
- G1.16. Wójcik T, Arendarczyk Z: **[Indomethacin in the treatment of rheumatoid arthritis in children]**. *Reumatologia*; 1973;11(2):165-72
- G1.17. Gutowska-Grzegorzczak G: **[Usefulness of choline salicylate in the treatment of children with rheumatoid arthritis]**. *Reumatologia*; 1977;15(2):251-6
- G1.18. Alekseeva EI, Shakhbazian IE, Isaeva KB, Khudoleeva EI, Chistiakova EG: **[Rheumatoid arthritis in children: modifying effect of cyclosporin A]**. *Klin Med (Mosk)*; 1998;76(1):46-9
- G1.19. Dolgoplova AV, Melikhova NI, Peterson IS, Kostrova AA: **[Immediate and remote results of immunosuppressive therapy of rheumatoid arthritis in children]**. *Vopr Revm*; 1975 Apr-Jun;(2):43-6
- G1.20. Iakovleva AA, Krasnova KN, Chenchikova EP, Vialushkina MD, Shkarenkova LV: **[Chlorbutin in the treatment of progressive forms of rheumatoid arthritis in children]**. *Vopr Revm*; 1981 Apr-Jun;(2):22-5

The complete list of publications in group one is available on [BioMedLib](#), and we update the online list on a continuous basis.

Group two (more coverage) includes 14040 publications. Here are the top 20.

- G2.1. Bendtzen K, Hansen PR, Rieneck K, Spironolactone/Arthritis Study Group: **Spironolactone inhibits production of proinflammatory cytokines, including tumour necrosis factor-alpha and interferon-gamma, and has potential in the treatment of arthritis**. *Clin Exp Immunol*; 2003 Oct;134(1):151-8
- G2.2. Moncrieffe H, Hinks A, Ursu S, Kassoumeri L, Etheridge A, Hubank M, Martin P, Weiler T, Glass DN, Thompson SD, Thomson W, Wedderburn LR: **Generation of novel pharmacogenomic candidates in response to methotrexate in juvenile idiopathic arthritis: correlation between gene expression and genotype**. *Pharmacogenet Genomics*; 2010 Nov;20(11):665-76
- G2.3. Cron RQ, Beukelman T: **Guilt by association - what is the true risk of malignancy in children treated with etanercept for JIA?** *Pediatr Rheumatol Online J*; 2010;8:23
- G2.4. Cooper IF, Siadaty MS: **'Clinical Drugs' associated with 'Arthritis': Top Publications**. *BioMedLib*

Review; ClinicalDrug;Arthritide:707078885. ISSN: 2331-5717. 2014/5/4

G2.5. Vejdani AH, Khakshoor H, McCaughey MV, Moshirfar M: **Partial and Total Descemet's Detachments in a Patient with Severe Terrien's Marginal Degeneration and Juvenile Idiopathic Arthritis.** *Case Rep Ophthalmol Med*; 2014;2014:279491

G2.6. Moran H, Hanna DB, Ansell BM, Hall M, Engler C: **Naproxen in juvenile chronic polyarthritis.** *Ann Rheum Dis*; 1979 Apr;38(2):152-4

G2.7. Schwartzman S, Fleischmann R, Morgan GJ Jr: **Do anti-TNF agents have equal efficacy in patients with rheumatoid arthritis?** *Arthritis Res Ther*; 2004;6 Suppl 2:S3-S11

G2.8. Guillou-Debuisson C, Salanne S, Maréchal C, Laporte E, Claudet I, Grouteau E: **[Osteoarticular tuberculosis: a differential diagnosis of idiopathic juvenile arthritis].** *Arch Pediatr*; 2010 Nov;17(11):1553-8

G2.9. Rose CD, Doughty RA: **Pharmacological management of juvenile rheumatoid arthritis.** *Drugs*; 1992 Jun;43(6):849-63

G2.10. Cassidy JT: **Medical management of children with juvenile rheumatoid arthritis.** *Drugs*; 1999 Nov;58(5):831-50

G2.11. Totan Y, Güler E, Guragaç FB, Dervisogullari MS, Tenlik A, Hepsen IF: **Cystoid macular edema associated with juvenile idiopathic arthritis resolved by a dexamethasone intravitreal implant.** *J Pediatr Ophthalmol Strabismus*; 2014;51 Online:e25-8

G2.12. Li J, Heinz C, Zurek-Imhoff B, Heiligenhaus A: **Intraoperative intraocular triamcinolone injection prophylaxis for post-cataract surgery fibrin formation in uveitis associated with juvenile idiopathic arthritis.** *J Cataract Refract Surg*; 2006 Sep;32(9):1535-9

G2.13. Balestrazzi P, Ferraccioli GF, Ambanelli U, Giovannelli G: **Juvenile rheumatoid arthritis in Turner's syndrome.** *Clin Exp Rheumatol*; 1986 Jan-Mar;4(1):61-2

G2.14. Fonollosa A, Segura A, Giralt J, Garcia-Arumi J: **Tuberculous uveitis after treatment with etanercept.** *Graefes Arch Clin Exp Ophthalmol*; 2007 Sep;245(9):1397-9

G2.15. Cooper IF, Siadaty MS: **'Pharmacologic Substances or Antibiotics or Clinical Drugs' associated with 'Agnogenic': Top Publications.** *BioMedLib Review*; PharmacologicSubstanceAntibiotic;Agnogenic:705418253. ISSN: 2331-5717. 2014/4/28

G2.16. **'Intravitreal Implant Physical Object': Top Publications.** *BioMedLib Review OC*; ;IntravitrealImplantPhysical:710497223. ISSN: 2331-5717. 2015/6/21; updates online.

G2.17. Ruperto N, Nikishina I, Pachanov ED, Shachbazian Y, Prieur AM, Mouy R, Joos R, Zulian F, Schwarz R, Artamonova V, Emminger W, Bandeira M, Buoncompagni A, Foeldvari I, Falcini F, Baildam E, Kone-Paut I, Alessio M, Gerloni V, Lenhardt A, Martini A, Hanft G, Sigmund R, Simianer S, Pediatric Rheumatology International Trials Organization: **A randomized, double-blind clinical trial of two doses of meloxicam compared with naproxen in children with juvenile idiopathic arthritis: short- and long-term efficacy and safety results.** *Arthritis Rheum*; 2005 Feb;52(2):563-72

G2.18. Wallace CA, Smith AL, Sherry DD: **Pilot investigation of naproxen/methotrexate interaction in patients with juvenile rheumatoid arthritis.** *J Rheumatol*; 1993 Oct;20(10):1764-8

G2.19. Cron RQ, Sharma S, Sherry DD: **Current treatment by United States and Canadian pediatric rheumatologists.** *J Rheumatol*; 1999 Sep;26(9):2036-8

G2.20. Endres W, Birkmeier K, Stoeber E: **Hypohistidinemia in juvenile rheumatoid arthritis.** *Acta Paediatr Scand*; 1976 Mar;65(2):184-6

[Group two](#) is also available online.

Additional resources

The following are additional online resources pertinent to this review article.

Downloadable PDFs - Subset of the publications listed in this review article, which don't require publisher's fees, hence the fulltext PDFs are readily downloadable.

Subset of [Group One](#) with fulltexts readily downloadable, for the years 1970 to 2015.

Subset of [Group Two](#) with fulltexts readily downloadable, for the years 1970 to 2015.

Export citations - Export the citations in RIS format (RIS format is used by RefWorks, Endnote, among others).

[Group One](#), for the years 1970 to 2015.

[Group Two](#), for the years 1970 to 2015.

Recent findings - The most recent findings: recreate the publication lists of this review article for the most recent months.

[Group One](#) for the past 3 months.

[Group One](#) for the past 6 months.

[Group One](#) for the past 12 months.

[Group Two](#) for the past 3 months.

[Group Two](#) for the past 6 months.

[Group Two](#) for the past 12 months.

Customize - Modify, customize, and recreate the publication lists of this review article, like by adding your keywords or range of dates, and by using the Advanced Search section.

Customize [Group One](#).

Customize [Group Two](#).

References

1. MedlinePlus Health Topics, 20131116: MedlinePlus Health Topics; National Library of Medicine; November 16, 2013; Bethesda, MD.
2. Siadat MS, Shu J, Knaus WA: **Relemed: sentence-level search engine with relevance score for the MEDLINE database of biomedical articles.** *BMC Med Inform Decis Mak*; 2007;7:1. [<http://www.biomedcentral.com/1472-6947/7/1>]