NEITHER ANTI-CITRULLINATED PROTEIN ANTIBODIES (ACPA) NOR POLYCLONAL IGG ARE ASSOCIATED WITH BONE MASS, IN ELDERLY MEN

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Background: Bone loss is associated with anti-citrullinated protein antibodies (ACPA) positivity in rheumatoid arthritis (RA) patients. This is shown in both in pre-clinical RA, and in more pronounced bone loss in serum positive patients compared to serum negative patients. Further, both ACPA and activated IgG stimulate osteoclastogenesis in vitro and in murine arthritis-mediated bone loss.

Objectives: Whether polyclonal IgG or autoantibodies are important for general bone architecture, and not only in arthritis-mediated bone loss, has not been determined but they may represent an important link between the immune system and bone.

Methods: Polyclonal IgG and ACPA were measured with ELISA in serum of 600 elderly men (mean age 80.2±3.5 years), in the cohort MfOS Gothenburg. In this cohort, bone was investigated with Dual-energy x-ray absorptiometry (DXA) and high-resolution 3D peripheral quantitative computed tomography (HR-pQCT). In C57BL/6 mice, high dose heat-activated polyclonal IgG was repetitively injected systemically or intraarticularly, and the bone was investigated with DXA and micro-CT.

Results: No association was determined between existing serum polyclonal IgG and ACPA, with the measured bone parameters, not total bone density, trabecular or cortical bone in the MoOS cohort. Systemic injection of activated IgG in mice did not affect general bone health, not total, trabecular, or cortical bone. Intraarticular injection of activated IgG was shown to give a local reduction in trabecular bone density of the tibia.

Conclusion: These data indicate that serum polyclonal IgG and ACPA do not influence general bone health in elderly men. However, in mice injection with activated IgG intraarticularly leads to a local reduction in trabecular bone. In conclusion, our data imply that ACPA and activated IgG need to be present in close connection to the bone, e.g., in the synovial area, to be able to mediate a reduction in bone mass.

Disclosure of Interests: Merja Nurkka: None declared, Marie Lagerquist: None declared, Priti Gupta: None declared, Dan Mellström: None declared, Claes Ohlsson Grant/research support from: Novo Nordisk, Cecilia Engdahl: None declared.


PARE Poster Tour 2

PODCAST FOR RHEUMATISM SUFFERERS AND THEIR RELATIVES

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Background: Two million people in Switzerland suffer from rheumatic diseases. The Swiss League against Rheumatism is committed to helping those affected. It provides them and their relatives with professional, neutral information on the subject of rheumatism. The Swiss League against Rheumatism has been publishing the podcast series “Rheumatism in person” since 2021. In it, affected people discuss relevant and current topics about living with rheumatism with experts. Another aim is to devote time to the personal experiences of sufferers. The pool of experts includes medical specialists, nutritionists, social counsellors and psychologists.

Objectives: The Swiss League against Rheumatism, as the national umbrella organisation, is expanding its communication services via the podcast in order to reach even more people with rheumatism in Switzerland. This makes it possible to increasingly address a younger, digital-savvy target group and to expand the service proposed for this target group. The podcasts are primarily aimed at people with chronic forms of rheumatism between the ages of 25 and 50 and their relatives in German-speaking Switzerland. A further aim is to bring the opinions of those affected to the attention of the public, as well as to provide information from specialists, thereby creating greater awareness of the disease.

Methods: Each podcast episode is about 30 minutes long. According to experience, this length is the most popular with most listeners, whilst also allowing complex topics to be explored in depth. The podcasts are issued monthly. This enables listeners to be prepared for a fixed release date. The episodes are produced in cooperation with a podcast agency. The advantage of an agency lies in its expertise and experience, especially in the technical field. Funding for the podcast episodes can be secured from sponsors.

“Things get complicated – social counselling for rheumatism,” “Sport and rheumatism – anything but a contradiction” or “Rare forms of rheumatism – lupus, EDS & co.” are popular episode titles, to name but a few. The podcasts are available on various international podcast platforms. The episodes are distributed via blog posts, existing newsletters and social media (Facebook, Instagram and LinkedIn). External distribution channels are used in the form of the interviewee’s networks, the “Junge mit Rheuma” (young people with rheumatism) group, national patient organisations, cantonal/regional rheumatism leagues, the Swiss Society of Rheumatology and any media coverage attracted.

Results: So far, the eleven episodes and accompanying trailer have been downloaded or streamed over 8,200 times by 5,300 unique listeners. All eleven topics were of great interest. The episode on “Anti-inflammatory nutrition” generated the most downloads (1,550), closely followed by the episode on “The coronavirus pandemic with rheumatism”, which reached just under 1,300 downloads (as of 21 January 2022). On 15 March 2021, the podcast series also made it onto the podium of a well-known podcast chart in the field of medicine. This clearly shows that there is a need among rheumatism sufferers and their relatives to obtain information via podcasts.

The large quantity of positive feedback from patients, rheumatologists and other health professionals is particularly noteworthy. “From the first second: very interesting topics, well produced and a great voice,” shared a listener.

Conclusion: The podcast series has proved successful and will therefore be continued as a complementary communication tool for the Swiss League against Rheumatism. In addition to the episodes already released, another ten episodes are planned in German.

The Swiss League against Rheumatism is keen to extend the podcast series to the French-speaking part of Switzerland. The idea is therefore to include French episodes in 2022. There are specific plans to record three episodes, which will be broadcast in the second half of the year. The aim is to add more episodes to the French podcast series in the long term.

REFERENCES: None

More information: Podcast: Rheuma persönlich - Rheumaliga Schweiz

Disclosure of Interests: Monika Sibert Grant/research support from: The Swiss League against Rheumatism has a sponsorship agreement with MSD Merck Sharp & Dohme AG and Pfizer AG for the production of the podcasts. The two companies have no influence on the content of the podcast. Tina Spichtig Grant/ research support from: The Swiss League against Rheumatism has a sponsorship agreement with MSD Merck Sharp & Dohme AG and Pfizer AG for the production of the podcasts. The two companies have no influence on the content of the podcast.