spine is the worst long-term outcome of this disease, although this occurs less frequently nowadays if compared to former decades. This fact might be related either to the natural course of the disease that becomes milder over time or to a consequent anti-inflammatory treatment initiated earlier in patients with axSpA. Structural damage in the spine in axSpA is usually assessed on plain radiographs of the spine and, therefore, is frequently referred to as radiographic spinal progression. In the presentation, pathophysiology, assessment and ways of prevention and/or retardation of structural damage progression in the spine in patients with axSpA will be discussed.


SP0083 MOLECULAR AND METABOLIC EVENTS WHICH UNDERWRITE T CELL PHENOTYPES IN AUTOIMMUNITY

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The distribution and function of T cell subsets in patients with systemic lupus erythematosus (SLE) is aberrant. Distinct molecular and metabolic event dictates the numbers and function of T cells. Specifically, the transcriptional repressor cyclic AMP response element modulator alpha (CREMα), which is increased in cells from patients with SLE, accounts for the decreased expression of interleukin (IL)-2 and the increased expression of IL-17 through distinct epigenetic processes. CREMα promotes Th17 cell expansion by promoting the expression of Gls1, the first enzyme in glutaminolysis and by suppressing the expression of pyruvate dehydrogenase phosphate catalytic subunit 2 that enables entry of pyruvate into the Krebs cycle. In parallel, calcium calmodulin-dependent kinase 4 which is responsible for the increased binding of CREMα to CAMP response elements of the IL-2 and IL-17 loci, promotes the activity of pyruvate kinase M2 and promotes glycolysis and TH17 generation while suppressing the numbers of regulatory T cells. Understanding the exact molecular and metabolic processes that control T cell function in SLE enables therapeutic considerations.


THURSDAY, 13 JUNE 2019

15:30:00 – 17:00:00

Difficult to manage Sjögren’s syndrome and Myositis

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Both myositis and Sjögren syndrome may be associated with cancer. However, there are differences between the cancer-associated myositis and cancer that appears in patients with Sjögren syndrome, and these differences make for a distinct tumor screening approach. The fact that any type of cancer -mainly of the oropharynx, larynx, laryngopharynx, bronchus, and breast- occurring in patients with Sjögren syndrome and myositis have synergistic value for treating systemic autoimmunity. Anergy, exhaustion or post-activation in autoimmunity; Facts and future consequences.

**WHO TO IDENTIFY AND INVITE TO AN FLS? WHO IS THAT FRACTURE PATIENT?**

**Bo Abrahamsson**, x, x, x, Denmark

**Background:** Though osteoporosis can be diagnosed through the presence of fragility fractures in the absence of other aetiology such as myeloma or metastases, patients with osteoporosis are also at increased risk of high impact traumatic fractures. Further, distinguishing between fracture mechanisms through chart review is often difficult and may lead to patients with osteoporosis being missed. On the other hand, focusing on identifying and treating patients at high imminent fracture risk rather than milder degrees of osteoporosis makes for better cost utility.

**Objectives:** To review the demographics of patients presenting with fragility fractures in the absence of other aetiology such as myeloma or metastases, patients with osteoporosis are also at increased risk of high impact traumatic fractures. Further, distinguishing between fracture mechanisms through chart review is often difficult and may lead to patients with osteoporosis being missed.

**Methods:** Narrative review of recent epidemiology studies and national and international guidelines.

**Results:** Based on epidemiology data from Iceland(1) and Denmark(2,3), the risk of subsequent fractures following a sentinel fracture event is critically dependent on the recency and the site of the initial fracture, with the risk of new fractures being particular high after major osteoporotic fractures(1) and pelvic fractures but less so after lower leg fractures(2).

In Danish women(2), 29.5% of patients suffering a pelvic fracture went on to sustain a hip fracture in the next ten years, compared with 25.9% after a vertebral fracture but only 12.5% after a lower leg fracture. Further, despite the high recurrent fracture risk in the FLS setting, it is important to appreciate that the majority of hip fracture patients have not consulted with a prior fracture in the last ten years prior to their hip fracture(3).

The following issues will be addressed in more detail:
1) Demographics of fracture patients with particular emphasis on age, sex and BMD.
2) Which fracture types are indicators of elevated risk of subsequent major osteoporotic fractures?
3) Which fracture types will respond to osteoporosis treatment?
4) What is the role of DXA in FLS?
5) Identifying vertebral fractures

**Conclusion:** FLS patients are at elevated risk of sustaining additional fractures both in the long term and in the short term, with risks being particularly high in the first years after the sentinel fracture and especially if the initial fracture is a pelvic fracture or a major osteoporotic fracture.

**REFERENCES:**


**Disclosure of Interests:** None declared

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