advanced stages of RA (3-4 stages by O. Steinbrocker) (two-way FET, p<0.0024) with the same duration of RA.

Conclusion: The taste threshold of PTC0 decreased the chances of RA p=0.0024) with the same duration of RA.

Disclosure of Interests: None declared


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ANALYSIS OF INFECTIOUS SPONDYLODISCITIS: 20-YEARS DATA: EPIDEMIOLOGY, CLINICAL FEATURES, DIAGNOSIS AND TREATMENT

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Background: Infectious spondylodiscitis is defined as an infectious disease involving intervertebral disks and adjacent vertebral bodies. It is rare and difficult to diagnose due to its non-specific clinical features.

Objectives: To study the clinical, microbiological, radiological, therapeutic and evolving of infectious spondylodiscitis.

Methods: Retrospective monocentric study including patients diagnosed as spondylodiscitis and hospitalized in our department between January 1999 and December 2018. The diagnosis was based on clinical, biological, radiological and bacteriological data.

Results: We included 107 patients. There were 58 men (54.2%) and 49 women (45.8%) with a mean age of 55 years [16-86]. Predisposing factors were found in 59 patients (55.1%): This was diabetes in 21.49% of cases, history of cancer in 2.8% of cases, hepatic disease in 5.6% of cases, a long-term corticosteroid in 1.8% of cases, recent spinal surgery in 0.93% of cases, visceral surgery in 3.73% of cases, extra-articular history of tuberculosis in 2.8% of cases and consumption of unpasteurized milk in 25.23% of cases.

The approximate time from onset of symptoms to diagnosis was from 0.23 to 24 months (median 3 months). Back pain was the most common symptom. Impaired general condition was observed in 71% of cases, fever in 35.5% of cases and night sweats in 42.9% of cases. Radiolog- gia was found in 42.9% of cases. A neurological deficit was noted in 1.8% of cases, spinal cord compression in 0.23 to 24 months (median 3 months). Back pain was the most common symptom. Impaired general condition was observed in 71% of cases, fever in 35.5% of cases and night sweats in 42.9% of cases. Radiul- gia was found in 42.9% of cases. A neurological deficit was noted in 16.82% of cases, motor deficit in 1.8% of cases, spinal cord compression in 1.8% of cases and Cauda equina syndrome in 2.8% of cases.

The inflammatory syndrome was found in 90.6% of cases. The lumbar spine was most affected (54.2%), followed by the dorsal spine (29.9%) and the cervical spine (8.4%). The spondylitis was multifocal in 19.6% and multistage in 15.8% of cases. Radiographs of the spine were abnormal in 83.1% of cases. CT and Spinal MRI was performed respectively in 60% and 78.8% of cases and showed paravertebral abscess in 63.5%, epiduritis in 54.2%, spinal cord compression 9.3% and vertebral osteolysis in 8.4% of cases.

The causative microorganism was identified in 51 cases (47.66%): brucella in 21 patients, mycobacterium tuberculosis in 16 patient, and pyogenic germs in 12 patients. All of them received initially adapted antibiotics. Surgical treatment was performed in 8 patients. Most of the patients showed good response (71.9%). Disturbance of liver function due to treatment occurred in 8 cases with good subsequent evolu- tion. Neurological complication occurred in 11 cases and sepsis occurred in 4 cases. And 4 patients were dead.

Conclusion: The microbiological diagnosis of infectious spondylodiscitis is often difficult to establish and the disease requires prolonged antibiotic treatment. Early diagnosis is needed to avoid nervous complications associated with poorer long-term outcomes.

Disclosure of Interests: None declared


BODY MASS INDEX AND SYSTEMIC CORTICOSTEROID USE AS INDICATORS OF DISEASE BURDEN AND THEIR INFLUENCE ON THE SAFETY PROFILE OF CERTOLIZUMAB PEGOL ACROSS INDICATIONS

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Background: Certolizumab pegol (CZP) is an anti-TNF drug approved for rheumatoid arthritis (RA), axial spondyloarthritis (axSpA), psoriatic arthritis (PsA), psoriasis (PSO) and Crohn’s disease (CD). Older age, comorbidity burden and corticosteroid (CS) use have been linked to increased risk of serious infectious events (SIEs) in CZP-treated patients (pts) with RA. However, the impact of overall disease burden on the risk of serious adverse events (SAEs) has not been fully examined for other CZP indications. High body mass index (BMI) has been associated with systemic inflammation and greater comorbidity risk. Greater disease burden in these pts may lead to increased CS use – a known risk factor for SAEs.

Objectives: To examine the contribution of BMI and CS use to the risk of SIEs, malignancies and major adverse cardiovascular events (MACE) in CZP-treated pts across indications.

Methods: Safety data were pooled across 49 CZP clinical trials (27 RA, 1 axSpA, 1 PsA, 6 PSO, 15 CD). SAEs of potential concern were medically reviewed by an external expert committee using predefined case definitions. Incidence rates (IR) were calculated per 100 pt-years (PY). Multivariate Cox modeling was used to estimate relative risk (hazard ratio [HR]) of time to first SIE, malignancy or MACE by baseline BMI (<18.5, 18.5–25, 25–30, >30 kg/m²) and CS use (yes, no). The model was adjusted for baseline age, sex, disease duration, methotrexate (MTX) use, prior anti-TNF drug use, and CZP indication.

Results: Across indications, 11,317 pts received CZP (21,695 PY total exposure; max: 7.8 years [yrs]; exposure for RA: 13,542 PY; axSpA: 978 PY; PsA: 1,316 PY; PSO: 1,481 PY; CD: 4,378 PY). Mean BMI was 27.8 kg/m² in RA, 27.6 kg/m² in axSpA, 29.8 kg/m² in PsA, 30.1 kg/m² in PSO, and 24.0 kg/m² in CD. Overall, 4,132 pts (37%) took CS at baseline, more so in RA (46%) and axSpA (51%). Across indications, IRs were 0.82/100 PY for all malignancies (IR for malignancies excluding non-melanoma skin cancer [NMSC] was 0.66/100 PY), 0.47/100 PY for
MACE, and 3.6/2.100 PY for SIEs. According to the Cox model, age ≥45 yrs, disease duration <1 yr (compared with ≥5 yrs), and no MTX use were risk factors for malignancies (including NMSCs); BMI and CS use did not have a detectable impact (Table). MACE risk was higher in RA and PsA; BMI ≥30 kg/m² was a risk factor for MACE, in addition to age ≥45 yrs and male sex (Table). Compared with RA, SIE risk was higher in CD and lower in PO and PsA; key risk factors included age ≥65 yrs, disease duration ≥10 yrs and CS use. Without CS use, BMI did not impact SIE risk, but among CS users, SIE risk was higher for obese pts (Table).

Conclusion: In CZP-treated pts across indications, malignancy risk was not influenced by BMI or CS use. As expected, obesity and CS use increased the risk of MACE. The SIE risk associated with CS use was compounded in obese pts, which may reflect the contribution of comorbidities, disease activity or other factors not examined here.

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RISK OF MAJOR AUTOIMMUNE DISEASES IN PATIENTS WITH FEMALE BREAST CANCER: A NATIONWIDE, POPULATION-BASED COHORT STUDY

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Background: Prior studies showed that breast cancer patients had an increased spontaneous expression of CTLA-4 on T lymphocytes in breast tissue and peripheral blood mononuclear cells, leading to impaired T cell activation. We hypothesized that breast cancer patients may have a decreased risk of autoimmune diseases. However, the incidences of autoimmunity disease in breast cancer are still unclear.

Objectives: To investigate the risk of major autoimmune diseases including systemic lupus erythematosus (SLE), rheumatoid arthritis (RA), Sjogren’s syndrome (SS), polyosomylitis (PM)/dermatomyositis (DM) in female breast cancer patients.

Methods: We identified all newly-diagnosed female breast cancer patients during 2007-2013 using the 1997-2013 Taiwanese national health insurance database as the incident female breast cancer cohort. We randomly selected non-breast cancer female controls matching female breast cancer patients for age and the year of index date from one million representative population as the comparison cohort. We estimated the risks of SLE, RA, SS, and PM/DM in female breast cancer patients compared with the comparison cohort using Cox regression analysis adjusting for age and Charlson comorbidity index, hormone therapy and chemotherapy.

Results: A total of 54,311 female breast cancer patients and 217,244 matched non-breast cancer female individuals were included. The mean ± SD age was 53.6±12.7 years in both groups. After adjusting for potential confounders, female breast cancer patient had a lower risk of developing SLE (hazard ratio [HR], 0.04; 95% confidence interval [CI], 0.01–0.24), RA (HR, 0.03; 95% CI, 0.02–0.04) and SS (HR, 0.21; 95% CI, 0.09–0.48) than the comparison cohort. However, the risk of PM/DM was not significantly different between female breast cancer group and the comparison group (HR, 0.37; 95% CI, 0.08–1.80).

Table 1. Incidence rates and risks of SLE, RA, SS and PM/DM in female breast cancer compared matched non-breast cancer individuals

<table>
<thead>
<tr>
<th></th>
<th>SLE</th>
<th>RA</th>
<th>SS</th>
<th>PM/DM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Event (%)</td>
<td>82 (0.04)</td>
<td>348 (0.16)</td>
<td>312 (0.14)</td>
<td>14 (0.006)</td>
</tr>
<tr>
<td>Person-years</td>
<td>186,360</td>
<td>185,557</td>
<td>185,713</td>
<td>186,581</td>
</tr>
<tr>
<td>IR/10^5 years</td>
<td>10.0</td>
<td>42.7</td>
<td>16.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

Breast cancer (n = 54,311)

| Event (%) | 4 (0.01) | 33 (0.06) | 35 (0.06) | 4 (0.01) |
| Person-years | 170,567 | 170,560 | 170,561 | 170,627 |
| IR/10^5 years | 2.3 | 19.3 | 20.5 | 2.3 |

Breast cancer patients compared with non-breast cancer individuals

| IRR (95% CI) | 0.23 (0.07–0.65) | 0.45 (0.22–0.87) | 0.54 (0.38–0.78) | 3.76 (0.45–4.15) |

| HR (95% CI) | 0.23 (0.08–0.65) | 0.45 (0.22–0.87) | 0.54 (0.38–0.78) | 3.76 (0.45–4.15) |

| Adjusted* | 0.04 (0.01–0.21) | 0.03 (0.02–0.21) | 0.09 (0.08–1.80) | 1.00 (0.98–1.02) |

*Adjusted variables included age, Charlson comorbidity index, hormone therapy and chemotherapy.

Female breast cancer patients had a decreased risk of developing SLE, RA and SS, but not PM/DM.

Conclusion: Female breast cancer patients had a decreased risk of developing SLE, RA and SS, but not PM/DM.

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