Post-surgery infection complications appeared in 8.5% and no patient had disease flare during the post-operative stage.

No association between infection complications and perioperative mismanagement of biologic agents (P: 0.359), nor with the biologic therapy-intensified dose (P: 0.379).

Conclusion

- Perioperative management of biologic therapy in real practice was not according to guidelines, while with DMARDS and glucocorticoids it was appropriate.
- We have not found risk factors associated with post-surgical complications in rheumatic diseases.
- Perioperative management could be a new challenge in the pharmaceutical care of biologic therapies.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-160 EFFICACY AND SAFETY OF ANAKINRA AND CANAKINUMAB FOR THE TREATMENT OF IL-36R ANTAGONIST DEFICIENCY

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Background Alterations in the interleukin (IL)–1 pathway have been shown to be involved in the pathogenesis of some auto-inflammatory diseases. Deficiency of the IL-36R antagonist (DITRA) is a recently described rare hereditary disease in which IL-1 antagonists may represent therapeutic alternatives.

Purpose To summarise the evidence for the efficacy and safety of IL-1-targeting drugs in DITRA following the scoping review's methodology.

Material and methods A scoping review was conducted following an a priori protocol based on the Joanna Briggs Institute Reviewer's Manual¹ and the recently published PRISMA extension for scoping review statement. A three-step searching procedure on MEDLINE and EMBASE databases until March 2018 with additional hand-searching performed article selection, and data extraction were carried out by two researchers independently. Evidence on the efficacy and safety of therapies for this disease were synthesised.

Results Nine case reports published between 2011 and 2018 were found. All patients were treated with anakinra at 2–5 mg/kg/day or 100 mg/day, and one patient was also treated with canakinumab 3 mg/kg every 8 weeks. The duration of anakinra treatment ranged from 3 days to 12 months. With regard to the efficacy of anakinra, time-to-response frequencies were evaluated as immediate (7/9), short term (3/9), and medium-long (2/9). One patient, in whom anakinra had previously failed, received treatment with canakinumab, and this treatment did not prove effective at the initial time or in the short- or long-term analyses. With respect to the safety of anakinra, one case of systemic infection was reported, one of renal and hepatic laboratory abnormalities, rising white blood cell count, deteriorating clinical status with progressive skin pustulation and pain at the injection site without erythema. No adverse events were reported in the patient who had been treated with canakinumab.

Conclusion Evidence of the use of anti-IL-1 drugs in DITRA is scarce and based on observational studies in whom anakinra

is the most commonly used drug, showing a good immediate response, but decreasing short- and medium/long-term responses. Larger studies with better methodological quality are required.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. The Joanna Briggs Institute. *The Joanna Briggs Institute reviewer's manual* 2015. http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBI-Scoping-Reviews_2015_v2.pdf (accessed 29 Sept 2018.)
 2. Dinarello C. Interleukin-1 in the pathogenesis and treatment of inflammatory diseases. *Blood* 2011;**117**:3720–32.
- No conflict of interest.

4CPS-161 SCOPING REVIEW ON THE USE OF CANAKINUMAB AND ANAKINRA IN INTERLEUKIN-1 ANTAGONIST RECEPTOR DEFICIENCY

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Background Deficiency in interleukin-1 (IL-1) receptor (IL-1R) antagonist (DITRA) is a rare genetic autoinflammatory disorder resulting from autosomal recessive mutations in the IL1RN gene. The use of IL-1 antagonists may prove to be a valid therapeutic alternative, but there is a lack of secondary studies that summarise the use of IL-1-targeting agents in this disease.

Purpose To summarise the efficacy and safety of IL-1 antagonist drugs in DITRA following the scoping review's methodology.

Material and methods The study was conducted and reported using the methodology described in the Joanna Briggs Institute Reviewer's Manual¹ and the PRISMA Extension for Scoping Reviews.²

Results Fifteen case reports studies describing 19 DITRA patients between 2009 and 2017 were found. Nine different mutations in IL1RN were described, showing a homozygous genotype in all cases. Pustular dermatitis and localised swelling represented the most frequent symptom of onset of the disease. These patients were previously treated with corticosteroids (n=13), antibiotics (n=12), NSAIDs (n=4), antifungals (n=3), acitretin (n=3) and, to a lesser frequency, with immunomodulatory drugs (methotrexate, cyclosporine, intravenous immunoglobulins, azathioprine, thalidomide or etanercept). The length of therapy with anakinra (n=17) and canakinumab (n=2) varied between 2 weeks and 4.5 years. All patients achieved immediate (day-hours) clinical responses and most patients also showed good clinical responses in the short (<12 weeks) (n=15) and medium-long (>24 weeks) (n=10) term. In the two patients treated with canakinumab, one showed good overall response, and the other required a dose increase to achieve a good response in the short term with no data available in the medium/long-term. With respect to drug safety, anakinra was associated with transient injection site reactions (n=3) and anaphylactic reactions (n=2). Discontinuation of anakinra in nine patients was reported following a flare-up of their disease. An episode of vomiting and diarrhoea was reported in a patient treated with high doses of canakinumab.

Conclusion The observed efficacy was high in patients with DIRA at all times, both with anakinra and canakinumab. However, evidence is scarce and of low quality, thus larger studies need to be conducted to reach more accurate conclusions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. The Joanna Briggs Institute. *The Joanna Briggs Institute Reviewer's Manual* 2015. http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBI-Scoping-Reviews_2015_v2.pdf (accessed 29 Sept 2018.)
2. *PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and explanation*. <http://annals.org/aim/fullarticle/2700389/prisma-extension-scoping-reviews-prisma-scr-checklist-explanation> (accessed 29 Sept 2018.)

No conflict of interest.

4CPS-162 MEDICATION COUNSELLING BY CLINICAL PHARMACISTS IN NEWLY GRAFTED RENAL TRANSPLANT RECIPIENTS

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Background Clinical pharmacy services are widely deployed in our UHC department of nephrology. Poor medication adherence (MA) is commonly encountered in kidney transplant recipients (KTRs), although MA is essential in preventing graft rejection. Thus, medication counselling (MC) was implemented to promote MA and safe therapeutic management.

Purpose The objective of this study was to describe MC activity and explore its impact on patient knowledge and motivation.

Material and methods A pharmacy resident presented two MC sessions for each newly grafted KTRs. The first MC session provided information regarding IA, food interactions and the management of forgotten doses, vomiting and travel using educational tools. MA is evaluated with the Morisky score, and patient's motivation to take their treatment with a visual scale. The second MC session allowed the resident to assess the previously acquired knowledge. Discharge medication prescription was explained through the discharge medication reconciliation.

Results From June 2018 to September 2018, 19 patients had MC (average age 59.7 years $\pm$ 14.5, sex ratio M/F 1.8, average length of stay 12.5 days $\pm$ 6.2). The average cumulative MC time was 39 min $\pm$ 8.4 per patient. The first MC session was carried out on average 7 days $\pm$ 2.9 after kidney transplantation. Eleven patients (58%) presented either minor or major MA problems. Sixteen patients (85%) correctly reported which IA they were taking, 18 (95%) correctly reported their dosing regimen and 18 patients (95%) were aware of food interactions and knew how to manage forgotten doses, vomiting and travel. Patients' motivation to take their IA significantly increased between the two MC sessions ($p=0.03$). All patients rated the role of their IA as 'extremely important'.

Conclusion These results show the benefits of pharmacist-led MC in newly grafted KTRs. Positive feedback from physicians and nurses confirms this approach. However, this service is time-consuming and requires continuous availability of clinical pharmacists in the unit. In order to ensure safe and efficient therapeutic management, documentation of these MC sessions in the medical patient chart is essential.

REFERENCE AND/OR ACKNOWLEDGEMENTS

Morisky DE, *et al.* Concurrent and predictive validity of a self-reported measure of medication adherence. *Med Care* 1986;24:67-74.

No conflict of interest.

4CPS-163 BONE METASTASIS TREATMENT IN PROSTATE CANCER: EFFICACY AND SAFETY

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Background Prostate cancer most commonly metastasises to the bones, and preventing related complications is important. Denosumab and Zoledronic Acid are recommended to prevent skeletal-related events and malignant hypercalcaemia.

Purpose The aim of this study was to analyse the efficacy and safety of Denosumab and Zoledronic Acid for the treatment of metastatic prostate cancer.

Material and methods A retrospective observational study including patients with metastatic prostate cancer in treatment with Denosumab or Zoledronic Acid (ZA), from 1 January 2015 until 30 August 2018 was conducted. An electronic prescription oncology program and medical records were consulted. The variables recorded were age, administered drug, duration of treatment, calcium levels (baseline and final) and adverse events. Efficacy was assessed as absence of malignant hypercalcaemia defined as serum calcium of grade ≥ 2 by the Common Terminology Criteria of Adverse Events version 3.0 (serum calcium >11.5 mg/dl). Safety criteria were considered: treatment interruptions, grade-3 hypocalcaemia in final test (serum calcium $<7-6$ mg/dl), osteonecrosis of the jaw and/or incidence of secondary cancers.

Results We included 52 patients with an average age of 73 (52-96) years: 43 treated with Denosumab 120 mg every 4 weeks, and nine treated with ZA every 3-4 weeks in a specific dosage according to renal function. Average duration of treatment with Denosumab and ZA was of 11 (0-40) and 11 (1-26) months respectively. Average blood baseline and final calcium levels in patients on Denosumab or ZA were respectively: 9 (8.5-11) mg/dl and 8.9 (6.7-10.4) mg/dl versus 8.3 (8.8-9.6) mg/dl and 8 (7.8-10) mg/dl. No patients presented with malignant hypercalcaemia. Twenty-two per cent of patients ($n=2$ patients) with ZA suspended treatment due to compromised renal function, and 2% of the patients ($n=1$ patient) with Denosumab suspended treatment due to jaw discomfort. A case of grade-3 hypocalcaemia and another one of jaw osteonecrosis were identified, both inside the group of patients on Denosumab. No secondary cancers were diagnosed.

Conclusion Most participants were treated with Denosumab. Both drugs were effective for the prevention of malignant hypercalcaemia. Most of the treatment interruptions were due to compromised renal function in patients who received ZA.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.