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(2) communication and relationship, (3) inclusion of complementary medicine, and (4) the importance of empirical evidence for complementary methods. The interviews were recorded, transliterated and evaluated with qualitative context analysis (Mayring, 2000).

#### Results

Concerning the integrative approach, high satisfaction existed regarding implementation of the whole person focus, communication and relationship. The most frequent positive statements were: high satisfaction with treatment, good communication and relationship with medical professionals and the feeling of being well-informed and taken seriously. The most mentioned negative statements were about impersonal communication and not being enough responsive to the parents emotions. Regarding the integration of complementary medicine, parents asserted that openness to complementary methods depended on personal attitudes of medical professionals. Parents would have wished a higher level of inclusion of complementary medicine. Being able "to do something" and thus contributing to the child's well-being was ranked more important by the parents than scientific evidence of complementary medicine.

#### Conclusions

Statements about communication and relationship were the main part of answers suggesting the high importance for parents. Parent empowerment in the sense of contributing to the well-being of their child themselves was perceived as important. In general, evidence about complementary medicine approaches was less important to parents suggesting a need for guidance by trained medical personnel in order to avoid possibly harmful selfmedication. Overall, the collaboration between the Department of Pediatric Hematology / Oncology and the Institute for Complementary Medicine was appreciated. Based on this small study, improvement would be needed in terms of communication as well as in offering a more standardized approach to optimize the integrative approach regarding complementary medicine in the future.

#### P117

#### Effect of Chinese herbal decoction Qinlingye extract (QLYE) on the FOXO3α expression in mice with hyperuricemia renal impairment Weiguo Ma, Fengxian Meng

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#### Purpose

# To investigate the effect of Chinese herbal decoction(QLYE) on the IL-6, VCAM-1 and Foxo3a expression in mice with hyperuricemia renal impairment.

#### Methods

The rat model was induced by gavaging adenine and feeding yeast. The successful models of mice (n = 60) were randomly divided into model, positive drug and high-, medium-, low-dose of QLYE, and were administrated with distilled water (10 ml.kg-1.d-1/i.g), allopurinol (23.33 mg. kg-1. d-1/i.g) and QLYE (7.46 g.kg-1.d-1/i.g, 3.73 g.kg-1.d-1/i.g) and 1.87 g.kg1.d-1/i.g) respectively. Model mice (n = 12) were used as the control group and given distilled water (10 ml. kg-1.d-1/i.g). After 8 weeks of intervention, all mice were sacrificed. RT-PCR was used to detect the mRNA transcription of Foxo3a, IL-6 and VCAM-1 in renal tissue. Western blot was used to detect the protein expression of IL-6 and VCAM-1 in serum.

#### Results

Compared with the control group, levels of IL-6 and VCAM-1 mRNA transcription and protein expression in the model group were significantly higher (P < 0.05). And levels of Foxo3a were significantly lower (P < 0.05). Compared with the model group, levels of IL-6 mRNA transcription in mediu- and low-dose groups were significantly lower (P < 0.01, P < 0.05). Levels of Foxo3a mRNA transcription in mediu-dose group were significantly higher (P < 0.05).

# 0.05). Levels of IL-6 and VCAM-1 protein expression in all three herbal groups were remarkably lower (P < 0.01, P < 0.05). Levels of Foxo3a protein expression in all three herbal groups were remarkably higher (P < 0.01). Conclusion

Kidney damage caused by high uric acid kidney tissues can appear when abnormal expression of IL-6, VCAM-1 and Foxo3a. QLYE can effectively improve the abnormal expression of both, with good renal protective effect.

#### P118

### A preliminary study for evaluation of cannabis - chemotherapy interactions on human colon cancer cells

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#### Background

Cannabis may be used for cancer pain relief, also in concomitance with anticancer chemotherapy. However, herb-drug interactions can lead to potentially severe and even life-threatening adverse reactions. For instance, inhibition or induction of CYP enzymes by herbal compounds can alter the ADME process of coadministered drugs.

This study aims to investigate the potential effects of phytocannabinoids from Cannabis extracts (CE), on drug transporters, cannabinoid receptors and proteins involved in nociception in human colon cancer cell lines.

#### Methods

Ethanolic extracts of Cannabis flos were titrated in HPLC-MS e HPLC-MS/MS. Human colon carcinoma cells sensitive (LoVo) and resistant to doxorubicin (DOX) (LoVo/DOX) were used. Total RNA of study genes was isolated and reverse transcribed. MDR1, CNR1, CNR2 and TRPV1 gene expression levels were evaluated using the housekeeping gene, 18 s rRNA, as endogenous control to normalize data.

#### Results

THC was 0.14% in Cannabis ethanolic extract. In CE untreated cells, basal gene expression levels of CNR1, CNR2 and MDR1 were higher in Lovo/DX cells as compared to LoVo cells. No substantial differences between the two cell lines for TRPV1 expression was observed. **Conclusions** 

In vitro studies on the effects of CE and their combinations with selected anticancer drugs in human colon cancer cells are ongoing. The results of our studies upon completion will contribute to understanding in vitro interactions between cannabis extracts and anticancer agents.

#### P119

## Feasibility study for a community based intervention for adults with severe Chronic Fatigue Syndrome/ ME

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#### Background

Chronic Fatigue Syndrome/ME (CFS/ME) is characterised by debilitating fatigue with many bedbound patients. The study aims were

- To determine whether a new intervention could be successfully delivered.
- To collect quantitative outcome data to guide the design of future studies.
- To explore qualitatively the experience of patients, carers and clinicians.

#### Methods

Mixed-methods feasibility study with qualitative and quantitative evaluation. Participants: 12 UK patients who were housebound with severe CFS/ME. Intervention: Based on recovery skills identified through a 2.5 year Patient and Public Involvement development process involving individuals with first-hand experience of recovery from CFS/ME, as well as current patients and clinicians. The resulting one year intervention, delivered by a multi-disciplinary team, included domiciliary therapy visits and optional peer support group. Quantitative outcome measures: Patient-reported and therapist-reported outcome measures (including fatigue, physical function, anxiety, depression and other variables) and electronic activity measurement.

#### Results

The study recruited and engaged twelve participants with no serious adverse events or dropouts. At end of intervention, 5/12 participants had improved in fatigue, physical function. Group mean scores improved overall for fatigue (Chalder fatigue scale), physical function (activity and physical function scale) and anxiety. Qualitative interviews suggested that the intervention was acceptable to patients, whilst also highlighting suggestions for improvement. Participants will be followed up for a further year to find out if improvements are sustained.

#### Conclusion

This is the largest study ever conducted in severe CFS/ME and shows significant recovery suggesting further studies are indicated. Treatment is uniquely based on a patient inspired intervention.

#### P120

## Effect of Qinlingye extract on the inflammatory signal pathway of NLRP3/TLR4/NF-κB in HKC cells

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#### Objective

The objective of this study was to investigate the effect of Qinlingye extract (QLYE) on the inflammatory signal pathway of NLRP3/ TLR4/ NF- $\kappa$ B in HKC cells.

#### Methods

HKC cells were cultured and induced by uric acid (UA) in model group. While stimulated by UA, the administered groups were intervened by high-, middle-, low-dose of QLYE (1000, 500, 250 umol/L). After 24, 36, 48 h of intervention, the total RNA and protein were extracted. RT-PCR was used to detect the mRNA transcription of NLRP3, TLR4 and NF-kB, Western blot was used to detect the protein expression of NLRP3, TLR4 and IkBa. **Results** 

1. Compared with the control group, the mRNA transcription of NLRP3 at 24 h, TLR4 at 36 h and NF- $\kappa$ B at 36, 48 h were higher in model group (P < 0.05); the protein expression of NLRP3 and TLR4 were higher, I $\kappa$ Ba was lower at 24, 36, 48 h in model group (P < 0.05, P < 0.01).

2. Compared with the model group, the mRNA transcription of NLRP3 in three administered groups at 24 h, TLR4 in high-, middle-dose group at 36 h, and NF-kB in high-dose group at 36, 48 h were lower (P < 0.05, P < 0.01); the protein expression of NLRP3 in high-, middle-dose group and TLR4 in high-, low-dose group were lower, kBa in high-, middle-dose group were higher at 24 h, the protein expression of NLRP3 in three administered groups and TLR4 in high-, middle-dose group were lower, kBa in high-, middle-dose group were lower, group were lower, kBa in high-, middle-dose group were higher at 36 h, the protein expression of NLRP3 in middle-dose group was lower, kBa in middle-dose group was higher at 48 h (P < 0.05, P < 0.01).

#### Conclusion

QLYE may inhibit the NLRP3/ TLR4/ NF- $\kappa$ B signal pathway to ameliorate the renal immune inflammatory injuries induced by UA.

#### P121

## Effectiveness of mindfulness- and relaxation-based eHealth interventions for patients with medical conditions: a systematic review

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#### Purpose

This systematic review aims to summarize eHealth studies with mindfulness- and relaxation-based interventions for medical conditions and to determine if eHealth interventions have positive effects on health. **Methods** 

A comprehensive search of five databases was conducted for all available studies from 1990 to 2015. Studies were included if the intervention was mainly technology delivered, included a mindfulness- or relaxation-based intervention strategy and if patients with a medical condition were treated. Treatment effects were summarized by vote counting for different outcomes.

#### Results

A total of 2383 records were identified whereof 17 studies with 1855 patients were included in this systematic review. These studies were conducted in patients with irritable bowel syndrome, chronic fatigue syndrome, cancer, chronic pain, surgery, and hypertension. All but one study were delivered online through a web-platform. One study delivered the intervention with iPods. The studies indicate that mindfulness- and relaxation-based eHealth interventions can have positive effects on patients' general health and psychological well-being. No effects were found for stress or mindfulness. Only five studies reported economic analyses of eHealth interventions without any clear conclusion. **Conclusion** 

There is evidence that mindfulness- and relaxation-based eHealth interventions for medical conditions can have positive effects on health outcomes. No app studies were retrieved, even though a vast number of smartphone apps exist which aim at increasing users" health. Therefore, more studies investigating those health apps are needed since many of them are in use.

#### P122

## Efficacy of ointment containing comfrey and propolis in the treatment of mild acute sports injuries

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