Conclusion Long-term TDF treatment produced stable analgesia in patients with CNCP and was preferred by the majority of patients to their previous medication. TDF was generally well tolerated in comparison with similar agents.

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SAT0126 EXPRESSION OF OPIOID RECEPTORS IN CHRONIC PAIN PATIENTS WITH FIBROMYALGIA, OSTEOARTHRITIS, PSYCHOSIS, RHEUMATOID ARTHRITIS AND HEALTHY CONTROLS

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Background Chronic pain, usually considered to be continuous or episodic pain of at least six months duration, is a common cause of major disability. Chronic pain involves affective, behavioural and social dimensions. The opioid system plays a major role in the pain controlling systems.

Objectives Therefore, our main focus was to investigate the patients health status and differences in the expression of opioid receptors in skin and muscle tissues of chronic pain patients with fibromyalgia (FM), osteoarthritis (OA), psychosis (PS), rheumatoid arthritis (RA) and healthy controls (C).

Methods The Visual Analogue Scale (VAS) and the Short Form 36-item (SF-36) Health Survey questionnaire were given to the patients. Snap frozen sections from skin and muscle tissues (taken from the left deltoid region) were obtained from 8 FM (all female, 30–65 years of age), 4 OA (2 females and 2 males aged 48–72 years), 5 female PS patients (aged 40–79 years), 3 RA (1 female and 2 males aged 48–72 years), and 9 age-matched healthy females (C). Total RNA was extracted, reverse transcribed, amplified and quantified by real time PCR (TaqMan, Perkin Elmer) using fluorogenic probes and specific primers for Delta (DOR), Kappa (KOR) and Mu opioid receptors (MOR). Intensity of expression in each tissue was determined. The expression of 18S mRNA was used as an internal control.

Results We observed a significantly reduced score in all patient groups compared to the control group regarding physical function in the SF-36 as well as in the VAS. An increase of DOR mRNA expression was found in PS and RA muscle, a decrease of KOR mRNA expression could be detected in OA skin compared to C. An increased expression of DOR (81.0 fold $p = 0.001$) and of KOR (13.6 fold $p = 0.009$) mRNA was detected in FM skin compared to skin of healthy controls. This expression was more increased in FM than any other investigated chronic pain condition. MOR was detected only in one skin and one muscle sample of two different PS patients.

Conclusion Patients expressing high levels of DOR and KOR including patients with FM, PS, and RA might be treated with novel therapeutic approaches modulating opioid receptors expression by selective opioids.

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Abstract SAT0126 Table 1

	FM skin	FM Muscle	OA skin	OA Muscle	PS Skin	PS Muscle	RA Skin	RA Muscle
DOR	+	=	-	+	-	+	-	+
KOR	+	=	-	+	-	+	-	-

The statistical calculation of the diseases compared to healthy control was performed by the Mann-Whitney test. *: $p < 0.05$, +: increase, -: decrease, =: no change.

SAT0127 RANDOMISED, CROSSOVER AND OPEN-LABEL TRIALS DEMONSTRATE THE EFFICACY OF TRANSDERMAL FENTANYL (DUROGESIC®) FOR THE TREATMENT OF CHRONIC NON-CANCER PAIN

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Background The value of opioids is recognised internationally in the management of chronic non-cancer pain (CNCP), and patient preference in relation to pain relief has become increasingly important in analgesic selection. When comparing opioids that have been titrated to effect we cannot logically expect to see much difference in efficacy.¹ Thus, patient preference, while important for all clinical decisions, deserves a special emphasis when treatment efficacies are comparable, or when therapies can markedly affect patients' quality of life.² The patient is, therefore, likely to be the best judge of the delicate balance between analgesic efficacy, side-effects and the overall pain experience. This reflects our choice of pragmatic outcome measures, such as quality of life and patient preference, in addition to pain measurements, for the clinical trials of opioids in CNCP.

Objectives

Methods We report here the results of a large, multicentre, 8-week, randomised, two-way crossover trial (study A) of transdermal fentanyl (TDF; Durogesic®) versus sustained-release morphine (SRM; MS Contin®), in which patient preference, pain control, quality of life and adverse events were assessed in patients with CNCP ($n = 256$).³ Subsequently, an open-label, non-randomised, 12-month study (study B) of TDF evaluated the long-term use of TDF in CNCP patients ($n = 532$),⁴ of whom 103 had participated in study A.

Results In study A, 65.1% of patients preferred treatment with TDF to SRM (27.8%), with 7.1% expressing no preference. The main reason for preference was better pain relief, as more patients considered that pain control was 'good' or 'very good' with TDF than with SRM therapy (35% vs 23%, respectively, $p = 0.002$). Furthermore, patients using TDF generally had higher overall quality-of-life scores than those receiving SRM in each of the SF-36 categories with significant differences for bodily pain, vitality, social functioning and mental health categories ($p < 0.005$). The TDF group were less likely to experience constipation (48% vs 29%, respectively, $p < 0.001$) than those receiving SRM. In study B, treatment with TDF provided stable, sustained, long-term pain control in large numbers of patients. After initial dose titration, the mean TDF dose stabilised without the loss of analgesic efficacy (only 7% of patients withdrew because of insufficient pain relief). Thus, the development of tolerance to TDF was not a clinical problem. TDF treatment was preferred over previous opioid treatment by 69% of patients, primarily because of superior pain relief, followed by greater convenience and fewer adverse effects.