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Abstract Submission Form

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Category Research	
PRESENTATION DETAILS	
Authors Parry E, Ogollah R, Peat G.	Title of Study The natural history of flare-ups in knee osteoarthritis: descriptive findings from a prospective daily diary study
What's the problem you are tackling? Acute exacerbations are a well-recognised feature of chronic obstructive pulmonary disease, gout and a range of other chronic conditions. By contrast research on acute 'flare-ups' in knee osteoarthritis is only beginning to emerge and these phenomena remain poorly described.	
How did/will you do it? Adults aged over 45 years with a recent GP consultation for knee osteoarthritis(OA)/arthralgia were invited to complete a postal questionnaire. Consenting respondents then participated in a daily diary study lasting up to 3 months. Pen-and-paper diaries gathered prospective data on knee pain intensity, pain quality, associated features (e.g. limp, swelling), potential triggers and change in medication. A 'flare-up' was defined as a ≥ 2 -point increase in average pain over the past 24 hours (0-10 NRS) above 'normal' pain levels which lasted for at least 2 consecutive days. A 'resolution period' was defined as a return of pain intensity to 'normal' baseline level or below for at least 5 consecutive days. An 'at-risk period' was defined as not being in a flare-up or resolution period. Descriptive statistics were performed.	

What did you find?

67 participants (mean age 62.2 (SD 10.6), 55% female) completed at least one month of diaries (52 completing all 3 months). 30 participants experienced a total of 54 flare-ups (14 experienced multiple flare-ups; incidence density 1.09 flare-ups/person-months). The median duration for a flare was 8 days (range: 2-30 days). Amongst those who experienced flares, comparing 'flare-up periods' vs 'at-risk days', mean (SD) pain was 5.4 (1.9) vs 3.0 (2.0); pain quality was more likely to be described as sharp (49% vs 11%), stabbing (36% vs 14%), throbbing (32% vs 16%), numb (24% vs 1%), burning (24% vs 9%), and less likely to be described as dull (17% vs 35%). During a flare-up, participants were more likely to report knee swelling (50% vs 35%), limping (64% vs 42%), stiffness (60% vs 26%), nocturnal pain (34% vs 10%), and taking more medication than usual (34% vs 12%).

Why does this matter?

Acute flare-ups of knee OA are associated with a change in pain quality, a range of other symptoms, and increased analgesic intake. The time taken for symptoms to resolve varies considerably between individuals. Further research on understanding the triggers for flare-ups, determinants of time-to-resolution, and characteristics of patients experiencing repeated flare-ups could inform prevention and management strategies.