

Correction

Walter M, Michels L, Kollias S, *et al.* Protocol for a prospective neuroimaging study investigating the supraspinal control of lower urinary tract function in healthy controls and patients with non-neurogenic lower urinary tract symptoms. *BMJ Open* 2014;4:e004357.

Figure 3 legend was inadvertently transposed with a section of the main text. The correct figure 3 legend is as follows:

Figure 3: Schematic diagram of the scan paradigm of four different task-related functional MRIs (fMRIs) at visits 2, 3 and 4. All task-related fMRIs identically start with a 'baseline' rest (60 s, no specific stimulus or task is performed), a 'baseline' rating of desire to void and level of pain, a short rest jittered between 7 and 9 s in which blood-oxygen-level dependent (BOLD) activation resulting from motor activity during the previous rating will return to baseline to avoid contamination of the following condition and conclude with a 'last' rest (60 s, no specific stimulus or task is performed). All task-related fMRIs consist of eight repetitive blocks, each with either five (first and fourth fMRIs) or eight (second and third fMRIs) conditions. (A) Conditions of the first task-related fMRI: (1) automated infusion of 100 mL body warm saline, (2) plateau phase (bladder distention after infusion is perceived), (3) rating of desire to void and level of pain, (4) passive withdrawal to empty the bladder completely and (5) short rest jittered between 7 and 9 s. This task-related fMRI starts with an empty bladder and will be performed in patients with non-neurogenic LUTS in visits 2, 3 and 4, while in healthy controls only at visit 3 (second MRI measurement). (B and C) Conditions of the second and third task-related fMRIs: (1) automated infusion of 100 mL warm saline, (2) plateau phase (bladder distention after infusion is perceived), (3) rating of desire to void and level of pain, (4) short rest jittered between 7 and 9 s in which BOLD activation resulting from motor activity during the previous rating will return to baseline to avoid contamination of the following condition, (5) automated withdrawal of 100 mL, (6) plateau phase (bladder distention after withdrawal is perceived), (7) rating of desire to void and level of pain and (8) short rest jittered between 7 and 9 s in which BOLD activation resulting from motor activity during the previous rating will return to baseline to avoid contamination of the following condition. The second task-related fMRI (B) starts with a low prefilled bladder volume (100 mL) and will be performed only in healthy controls at visits 2 and 3 (first and second MRI measurements). The third task-related fMRI (C) starts with a high prefilled bladder volume (persistent desire to void) and will be performed in all participants (patients with non-neurogenic LUTS and healthy controls) during visits 2 and 3 (first and second MRI measurements). Additionally, this task-related fMRI will be carried out in patients with non-neurogenic LUTS at visit 4 (third MRI measurement). (D) Conditions of the fourth task-related fMRI task: (1) automated infusion of 100 mL cold (4–8°C) saline, (2) plateau phase (bladder distention after infusion is perceived), (3) rating of desire to void and level of pain, (4) passive withdrawal to empty the bladder completely and (5) short rest jittered between 7 and 9 s. This task-related fMRI starts with an empty bladder and will be performed in all participants (patient with non-neurogenic LUTS and healthy controls) during visit 2 and 3 (first and second MRI measurement). Additionally, this task-related fMRI will be executed in patients with non-neurogenic LUTS at visit 4 (third MRI measurement).

In addition, on page 5 'Study outcome measures'/'Primary' the first section '(A)' should read:

BOLD signal intensity changes during task-related fMRI in relation to the specific condition, that is, infusion or to a contrast, that is, low versus full bladder volume, during two (healthy controls) or three (patients with non-neurogenic LUTS) visits. Investigation of these changes will focus on supraspinal regions of interest (ROI) that are known from the existing literature, for example, pons, insula, anterior cingulate cortex, thalamus, hypothalamus, supplementary motor area and prefrontal cortex. However, the precise selection of ROIs will be based on the coordinates of the peak activations during task-related fMRI taken from the Montreal Neurological Institute (MNI) space.

Finally, in table 1 the expansion of the acronym 'UTI' should have been included – 'UTI, urinary tract infection'.



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