

## CPPD— OCCUPATIONAL CONTRIBUTION

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**C**alcium pyrophosphate dehydrate crystal deposition disease (CPPD) is an inflammatory arthritis produced by the deposition of calcium pyrophosphate crystals. The pathogenesis is not fully understood, but some risk factors were associated such as aging, previous trauma or some metabolic conditions. The involvement of joints like the metacarpophalangeal, which are not typically affected by osteoarthritis, should raise the suspicion of CPPD. Diagnosis is based on the clinical manifestations, radiographic and laboratory findings. The author presents a case report in which occupational exposure, through the contribution of chronic microtrauma, appears to be the main etiological factor for CPPD, an association never reported before. This case refers to a 63-year-old man, who worked as a medical pathologist for 30 years, specialized in cellular microscopy. His daily tasks consisted of using the microscope about eight hours per day and involved highly repetitive precision movements of fingers and hands at high rate with insufficient recovery time. After 25 years in this job, he gradually developed complaints of bony enlargement, tenderness, warmth, erythema and swelling referred to the metacarpophalangeal and 1st interphalangeal joints of the 2nd and 3rd right fingers. Secondary causes of CPPD were excluded and the immunological study was normal, but the radiographic images showed intra-articular calcifications and arthritis in the metacarpophalangeal joint of the 3rd finger of the right hand and marginal osteophytosis in this topography, with the deposition of calcium pyrophosphate crystals. This case opens the possibility of a new etiology for CPPD as well as this classification as a work-related disease.

### Biography

Sílvia Oliveira has graduated from Faculty of Medicine, University of Porto as Medical Doctor, with the specialty of Occupational and Health Medicine, from Centro Hospitalar do Porto. She obtained her post-graduation in Occupational Health from Faculty of Medicine, University of Coimbra. Presently, she is working in the Occupational and Health division, in Centro Hospitalar do Porto, Portugal.

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