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RESUMPTION OF PROFESSIONAL AERONAUTICAL ACTIVITY AFTER SPINAL SURGERY IN AIRCREW

REPRISE DE L'ACTIVITÉ AÉRONAUTIQUE PROFESSIONNELLE APRÈS CHIRURGIE RACHIDIENNE CHEZ LES PERSONNELS NAVIGANTS

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Introduction: Spinal pathologies are common in Western populations as well as in aircrew (AC). Their treatment may require surgery, with the possibility of incomplete functional recovery. Flight fitness can therefore be questioned.

Method: At the beginning of 2017, the authors carried out a prospective, multicentric, anonymous questionnaire study within the 3 French military aeromedical centers (Bordeaux, Paris and Toulon). It includes 1,500 aircrew interviewed. The main objective is to estimate the impact of spinal surgery on the aeronautical activity of French civil and military aircrew.

Results: Of the 1,418 usable questionnaires, 950 people (67 %) reported having already had at least one spinal pain episode. Only 39 had surgery (2.75 % of the selected subjects and 4.1% of the painful aircrew). The three main pathologies that required surgery are lumbar and cervical disc pathologies and degenerative osteoarthritis. Five operated people (12.8 %) have an impact on their aeronautical fitness. After pairing by a propensity score on several factors, it appears that the operated subjects on a spinal pathology aircrew present a 4 times higher risk to not recover an aeronautical fitness identical to that which precedes surgery compared to painful patients without surgery. Going back to flight takes place on average 19 weeks after the surgery.

Conclusion: Spinal surgery seems to have a bigger impact on aeronautical fitness than medical treatment. This data, although it needs to be confirmed by other studies, must be taken into account before proposing spinal surgical treatment to aircrew.