

Editorial

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Abdominal and Pelvic Adhesions Research in Sub-Saharan Africa: Air Must Become Wind

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Abdominal and Pelvic Adhesions (APA) are pathological fibrotic bands developed between any surfaces in the abdominal and pelvic cavities.¹ They can be congenital or derive from surgery, infections, inflammation, malignant neoplasia, dialysis and radiation.²⁻⁵ Adhesions are the most common postsurgical complication occurring in 63 to 97% after abdominal or pelvic procedures.^{3,6-8} Their consequences in terms of infertility, abdominal and pelvic pain, and bowel obstruction, have become more preoccupant two centuries ago with the development of surgical techniques due to the use of anesthesia.^{6,9,10} These postoperative adhesions, being the most prevalent, have led to various researches and strategies for their prevention.

Although an active commitment of scientists mainly from Europe, Asia and America has been obvious, adhesions remain one of the domains with many controversial considerations existing in many areas of their understanding. Therefore, the contribution of scientists from all over the world is necessary and required.

From their first description in 1836 in a patient with peritoneal tuberculosis,¹⁰ inestimable progress in research on adhesions highlighted the prominence of various biological pathways in their pathophysiology. Since, thousands of studies, from clinical or experimental settings have been published, and one can observe the scarcity of African studies particularly from Sub-Saharan Africa (SSA). However, arguments can be developed to show particularities with regard to APA and the potential heavy burden of this condition in SSA.

ADHESIONS FROM INFECTIONS AND SURGERY IN SUB-SAHARAN AFRICA

Infections are responsible for an important morbidity in SSA. This includes sexually transmissible infections, postpartum and post abortum infections, and postoperative infections whose prevalence is the highest in the world.^{11,12} In addition, surgery, particularly abdominal and/or pelvic surgery is mostly practiced in precarious conditions.^{12,13} Since it is clearly known that infection and abdominal surgery are the main risk factors of adhesions,^{14,15} SSA is expected to experience high prevalence of APA.

THE BURDEN OF ADHESIONS IN SUB-SAHARAN AFRICA

Evidence exists on the role of APA in infertility.^{16,17} Overall, 20 to 40 % of infertility cases are secondary to APA.^{17,18} Studies in SSA showed that fibrosis, particularly through APA, ranked first in etiologies of secondary female infertility¹⁹⁻²¹ which is the most common type in this part of the world.^{19,22} Women experiencing the drama of infertility generally present with

tubal factor infertility^{20,21} requiring expensive therapies. But such expenses cannot yet be afforded by Sub-Saharan couples being in low income conditions and paying themselves for their health care. Apart from infertility, other morbidities associated with APA such as bowel obstruction²³ and ectopic pregnancy^{24,25} have shown particular concerns in SSA, indicating an extra burden for APA.

TIME TO MOVE FORWARD

We talked about the scarcity of Sub-Saharan studies on adhesions. In fact, some researches on adhesions have been published from African scientists. We can cite without being exhaustive, the study by Shokeir et al.²⁶ in Egypt on infertile women undergoing laparoscopy, the study by Arung et al.²⁷ conducted through a partnership between the Democratic Republic of Congo and Belgium on the effect of Parecoxib to prevent postoperative adhesions in rats and the study by Dupont et al.²⁸ in Cameroun on the incidence of adhesions at second look laparoscopy after abdominal myomectomy. Our team has been interested in this condition and is working on the relationship between adhesions and pathologies whose prevalence has been found to be higher in black people, to help profiling high risk patients for adhesion prevention.²⁹ This means there is no doubt that some Sub-Saharan research teams are working on adhesions. But given the heavy burden of this condition, still to be recognized as underlined in the present paper, and the particularities of SSA from many views, we think that researchers have a huge and quite unexplored forest that can feed scientific literature with new insights on APA in order to contribute to the great challenge of adhesion prevention. And this development will turn more successful through partnerships considering the implication of experienced scientists from all over the world.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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