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Researchers develope novel bicycle saddle that prevents chafing, pain and other damage associated with genital area

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Researchers at the University of Alicante have developed a novel bicycle saddle that prevents chafing, pain and other damage associated with the genital area as impotence and prostatitis.

It is a hinged articulated saddle whose coccyx-support narrow front and wide back have been articulately joined. The front part is mobile while the back is fixed, and both may change their positions at the user's will.

This new concept of bicycle saddle is designed and patented by researchers from the University of Alicante's Institute of Physics Applied to Science and Technology and the Department of Physics at the Polytechnic Higher School.

The UA researcher, Alfonso Panchón Ruiz, head of the research work, explained that "the main advantage of this new design compared to traditional saddles, is that it allows –at the user's will- to rest and recover from fatigue the perineal area suffering lasting intense compression for which they are not designed anatomically".

"The classic bicycle saddle has a unitary structure formed by a rigid body in anteroposterior direction which makes that, permanently, the perineal tissues, which are soft and not ready to withstand these forces, are being compressed, independent of the position taken by the user. For this reason, soon after starting the exercise, nerves and arteries reach

high levels of compression, which causes problems associated with lack of blood supply, such as numbness and affection of the genitals in both men and women, and in the long run, significant pathologies requiring medical treatment may appear", Alfonso Panchón says.

Up to date, only two solutions have been found, either to go up on the pedals, on a typical pedalling, visible both in professional races and gyms, or dismounting the bike and standing up, abandoning thus, the exercise started.

In this sense, Alfonso Panchón explains that "with this new design, it is not the user who must be separated and rising from the seat, but it is the saddle which separates spinning or scrolling down to the perineal area of the user. Thus, it radically prevents pressure on that area, immediately improving the blood supply to the affected areas, resulting in functional recovery of the tissues concerned.

Another advantage is that the user does not lose balance control ability in driving, regardless of the conditions of use, race, walk, gym, mountain, etc.., and this allows users to make new lateral movements on the anterior mobile part as well as immediately recover –at their will- the traditional full seat with a slight initial reverse movement.

Also, with this model of saddle, more than ten centimetres can be released between the seat and handlebars, which can be availed with competitive advantage in declines as it allows an aerodynamic position on very steep slopes.

The research team has a prototype that allows them to check the health and medical benefits of this innovative aerodynamic concept of saddle. Currently, there is nothing similar on the market, so it is a technology with great potential for international marketing.