Stallion like behaviour in the gelding

Why do geldings and juvenile males "play mount" mares at pasture. And why do some geldings appear fairly serious in their sexual behaviour even to the point of serving mares.

It has long been thought that leaving some or all of the epididymides behind creates what is known as a "proud-cut" gelding. Before research showed differently, it was believed that the epididymis produced male hormones and that leaving some or all of the epididymides at the time of castration would leave the gelding with a small amount of male hormones. The expected advantage would be that the proud-cut gelding would perhaps retain a bit more of the showiness, athletic drive, and work ethic of a stallion, without the challenge of the unwanted or unmanageable sexual and aggressive behavior of an intact stallion.

Science has shown that the hormones that could affect stallion-like behavior actually originate in the testicle. The hormones arrive from the testicle either fully produced or in a near-complete form. They undergo conversion into the final active form in the epididymides. If one or both of the epididymides are left behind when the testicles are removed, the steroid hormones and raw materials for conversion that came from the testicles dissipate. Perhaps there is something from the epididymides that has yet to be discovered that affects behavior. Even the question of whether behavior is really different in proud-cut stallions has not been studied in organized research.

So in the case of stallion-like behavior in a gelding, the first important question is: Were both testicles fully removed at the time of castration? A fairly common scenario is that one of the testicles is not in the scrotum at the time of castration, so it is not removed. It can be out of easy reach high in the inguinal area, or it can be all the way up in the abdomen. It would require some diagnostics to locate a remaining testicle and more complicated surgery to remove it, and so it is just left in many cases. The usual plan is to wait and see how the "cryptorchid" gelding does.

A less-common finding is that a small piece of testicle is inadvertently left. This "remnant" can still produce enough male hormones to drive sexual behavior.
Complete castrates can show stallion-like behavior depending how old or experienced these colts were when castrated. Older more experienced colts or stallions are more likely to have a wide range of retained stallion-type sexual and/or aggressive behaviors.

Some geldings mellow out to having almost no recognizable male-type behaviors, while others are indistinguishable from intact stallions. This is not just the overt interest and sexual response to females, but all of the male-typical behavior. For example, some confirmed geldings still always defecate in the same place, forming stud piles like stallions.

Showing sexual behavior only at pasture is also a common observation of gelding owners. There is more to stallion behavior than just testicular hormones. Many geldings--no matter how young or old and whether or not they had sexual interactions or breeding experience before castration--retain stallion-like behavior. Their sexual and aggressive behavior is usually much more muted and is more easily controlled with usual training and handling methods than it is for intact stallions. But at pasture uninhibited by people or by the presence of more dominant males, the stallion-like herding, teasing, and mounting seems to blossom, and these behaviors are, of course, very difficult to control.

Geldings, like some stallions--especially those with low libido--can be more or less not interested in most mares, but every once in a while they might find one particularly stimulating. Another possible factor is that any sexual interaction is sexually arousing to other herd mates. You see this effect in natural breeding situations, both with youngsters and with bachelor stallions.

When teasing and breeding occurs among a herd it appears to excite activity in other males, both mature, immature and entire or castrated, whether in the play form or in inter-male mounting among the bachelors. It has been called the voyeur effect.

The administration of female hormones such as progesterone, appear to somewhat subdue stallion-like behaviour and although usually not effective for pasture situations, they might be helpful in quieting a stallion or gelding for work or show situations.

Basically all horses are individuals with varying personalities and this won’t be altered much by gelding.