



PEDIGREE DYNAMICS

Gelding - Owner versus Trainer, Facts and Fallacies on Castration

Gelding has always been a touchy subject in racing. "To geld or not to geld?" has often been a topic of debate between owners and trainers of colts since racing began.

Part of the attraction of the racing industry is its uncertainty, and the purchase of every new racing proposition brings with it the owners' hopes that this will be the one - the colt that earns a huge fortune on the track, and can then be sold or syndicated for telephone number figures. And over the years, as the thoroughbred breeding industry has blossomed, the value of (especially well bred) stallions who were successful racehorses has increased.

But how realistic is this dream? What percentage of entires live out these dreams for their owners? The truth is, it is very small, and many trainers would argue that had some of their colts been gelded they would have perhaps lived out part one of the fantasy by becoming successful racehorses.

The castration of horses is a practice which has been carried out by humans for over 2,000 years. As a regular riding horse, the gelding was favoured by many races and tribes throughout history. As work horses, geldings were preferred for being more co-operative, urinating less frequently than mares, and being less vocal and aggressive than the majority of stallions. Some also believed that geldings were generally faster than their 'entire' counterparts.

Modern logic behind the castration process is fundamentally that by taking away the organs that supply the hormones for sexual motivation, the gelding will be left without the undesirable behaviour and secondary physical characteristics of the stallion, and although the racing industry's attitude towards gelding is generally positive, many people adhere to old assumptions on the effects, both physical and mental that gelding has upon their racehorses.

As reproduction is a primary motivating force behind the behaviour of all living things, the removal of the testicles, which are the major source of the male hormone testosterone, is therefore supposed to considerably alter his behaviour. Traits which are commonly linked with equine masculinity, such as aggression, sexual response to the presence of mares (especially those in season), calling out and inattention, are considered at best antisocial and at worst, a nightmare for a racing colt's connections.

Entires often suffer self inflicted injuries brought about by aggression and frustration. There are several tragic examples of talented colts that have had to be retired or destroyed as a result of stable and paddock injuries caused by aggressive behaviour.

But does gelding guarantee a horse totally free from 'stallion' traits? A study conducted at the University of California (USA) says no. The retrospective survey of 140 horses which had been castrated for more than a year concluded that between 20 and 30 per cent still behaved to some degree in a stallion-like way towards mares and were aggressive to other horses. Five percent were aggressive towards people.

The levels of testosterone were compared between the more docile geldings and the aggressive group. They were found to be the same and it was therefore assumed that some horses are more sensitive to this hormone. The adrenal glands also produce testosterone, so over-active adrenal glands can also affect a gelding's behaviour.

The subjects had been gelded before the age of two (pre-puberty) or after the age of three (post-puberty). Their research revealed that there was little difference in the eventual behaviour of horses gelded before or after sexual maturity, although stallions which have regularly served

mares are less reliant on their hormone levels for sexual stimulation and may take up to eighteen months to lose their interest in the opposite sex.

Many owners delay gelding their colts until after puberty (around two years), when they have been broken in and perhaps had their first preparation, in the belief that gelding before puberty stunts the growth and hinders development. In fact, the opposite is true!

A rush of testosterone in the colt during puberty is responsible for triggering the closure of the growth plates in the long leg bones. Without this hormonal rush, the early gelded horse's growth plates stay open longer and he therefore may continue to grow taller and develop more than his 'entire' or late gelded peers.

An overwhelming proportion of the patients treated by Professor John Yovich, Senior Equine Surgeon at the Murdoch University of W.A., are racehorses and trotters. He advises that it is quite acceptable to geld a foal at only a few months of age with no ill effects, and earlier should problems such as inguinal hernia (rupture of the abdominal wall of the scrotal area) occur.

"The testes must be of reasonable size and have descended into the scrotum in the younger horse before gelding is performed," said Dr. Yovich, "although in older horses, an undescended testicle can be surgically 'sought out' for removal. Younger foals have generally had less handling and will therefore often require a general anaesthetic instead of the routine local anaesthetic used when a horse is castrated whilst standing."

Castration will also prevent - or in the case of those older than two years, reverse - the development of the fat deposit along the crest of a stallion's neck. This fatty layer can imbalance the otherwise muscularly defined appearance of the racing colt and many fear that this 'heavy fronted-ness' can place extra weight on a racehorse's already pressured front legs. Contrary to popular belief, there is however, apparently no difference in the actual muscle mass of a gelding and a stallion, however the gelding generally has a more 'rounded' or feminine appearance due to the development of fatty deposits between the muscles.

Trainer David Hayes sees the role of castration as twofold: firstly to improve the temperament and attitude of the horse and secondly, to reduce the heaviness and consequent pressure on the forelegs.

Veterinarian, owner and trainer Alan Bell also sees these points as paramount.

"Some colts get 'piggy' and unenthusiastic in their training," he explains. "Their minds are on things other than racing which of course makes them uncompetitive. Gelding certainly can improve their behaviour and attitude."

Schillaci, one of Alan Bell's better known racehorses, was gelded when he turned three, although in his case, temperament was not a problem.

"We gelded Schillaci purely because he was becoming too heavy in front," explains Alan. "He is a heavy, muscular horse in any case and the extra weight carried in front by an entire can make the difference to whether a horse stays sound."

Another reason given for gelding racehorses is that their testicles can be pinched or 'squeezed' between their hind legs in running. Many a jockey (and trainer) has believed this to be the reason that their colt has raced awkwardly, especially on the turns, however there is no documented evidence that testicles actually become pinched while the horse is racing. A racing veterinarian questioned on whether he had ever seen evidence of bruising on the testicles removed from racehorses in work gave a definite 'no', however many trainers would vigorously argue that pinching does occur.

"I had a Sir Tristram colt which ran last in two trials - he was galloping awkwardly and I had him gelded and turned out. When he came back into work he won his next trial," Alan Bell relates. "Although there's no scientific evidence of pinching occurring, in my experience gelding does improve the race performance in some horses which were thought to have been squeezing themselves."

Tommy Smith also asserts that pinching is a valid reason for castration.

"Australia's climate is too hot for racing colts," he said. "Their testicles swell and the dust chafes between their legs. I've won nearly all my races with geldings."

Of course, not all bad performances handed in by colts can be blamed on this phenomenon, and it is likely that more than a few have been wrongly gelded for squeezing.

As veteran Western Australian trainer Brian (Buster) O'malley recounts, "I've had jockeys come in after races and trials saying that colts are squeezing themselves, so I've had them gelded. But when they've come back into work the problems are still there, and they've turned out to be lamenesses or back problems."

Not that Buster has any qualms about gelding his horses.

"In my opinion geldings make the better racehorses. They're much more focused on the job of racing, and they're much easier to handle on a daily basis."

Another fallacy about geldings brought about by comparison with colts and stallions is that they can be sluggish or lazy.

When the activity levels of mares, geldings and stallions are compared however, the truth is not that geldings are underactive, but that stallions are hyperactive - expending extra energy on male bravado and capturing the attention of mares. With fewer anxieties than the stallion and a more social lifestyle deprived to many colts in work, the gelding's metabolism is more in line with a mare's. He requires less rest and less feed than a stallion and he can become more focused on his work without such heavy hormonal influences.

Generally, the racing gelding leads a much more sociable and stress free life than an entire. He can be walked to the track with other geldings and mares without fear of confrontation, can be tethered and yarded within touch of other horses and worked much more closely and indiscriminately with other horses.

From the trainer's and the veterinarian's point of view, they are much easier to work with and when you consider just how much hands-on attention a racehorse in work receives, this can make a major difference in the effectiveness and amount of treatment and handling.

From the owners point of view, it is also cheaper to spell a gelding who, unlike colts and stallions, does not need to be accommodated within six foot fences with raceways separating them from their neighbours.

Gelding does however, have one major drawback - it is irreversible. If that beautifully bred colt which was gelded at two years does happen to come out and win the Golden Slipper or ends up on Millionaire's Row, human nature dictates there will usually - depending on the depth of pedigree and the sensibility of the owners - be a lot of teeth gnashing and finger pointing over the decision to castrate.

But would he have been so successful as an entire? Or would inattention, aggression, hyperactivity or heavy fronted-ness affect his ability?

Would Veandercross, Rough Habit, Schillaci, Bonecrusher, Mahogany, Kingston Town, Placid Ark or countless other good racehorses have raced as well under the effects of testosterone? In the tradition of all things racing, gelding is yet another gamble, however chronic post operative regret is not the norm in either the horse or his connections.