



**VETIGEL®**

*Equine Application*

# General VETIGEL® Application Tips

1

If suture ligation or vessel twisting is possible it should be used in conjunction with VETIGEL®.

2

Bleeding volume and pressure should be slowed as much as possible prior to VETIGEL® application. This can be achieved with direct pressure, tissue tension, cold application, vasoconstrictive agents and tourniquet application.

3

VETIGEL® is most effective if it is applied directly to the bleeding tissue, so all pooled blood and blood clots should be removed prior to application.

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VETIGEL® requires some bulk to achieve hemostasis. A VETIGEL® thickness of at least 1 cm is recommended. In general, the more VETIGEL® applied, the better the performance of the device.

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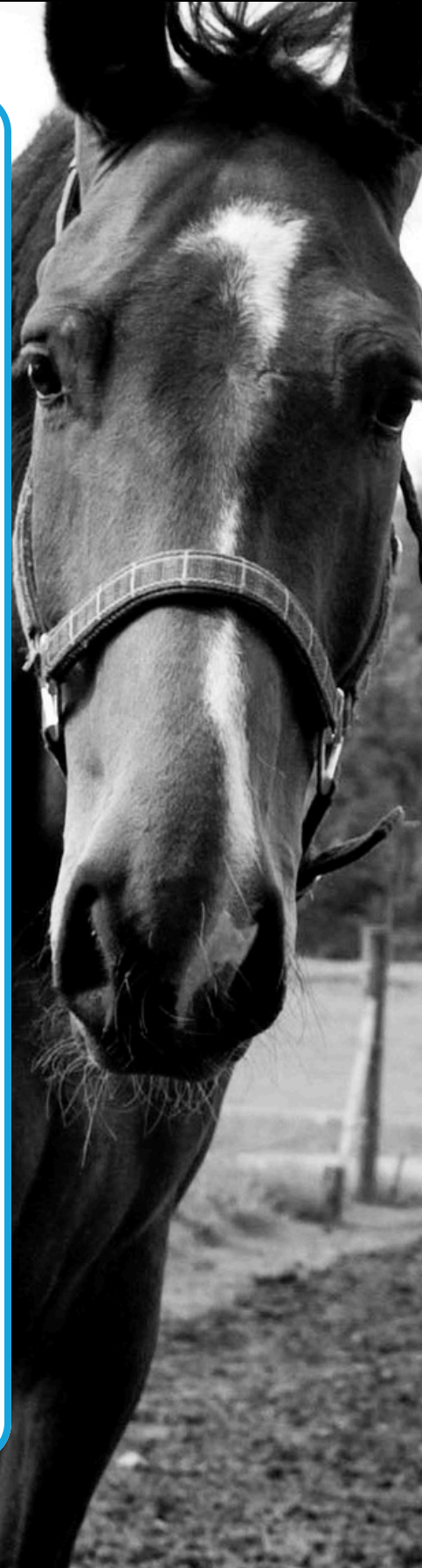
Direct syringe application is best, especially if the bleeding tissue is focal and bleeding can be slowed or stopped temporarily prior to application.

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Application of VETIGEL® to saline dampened gauze prior to tissue application results in some adherence of VETIGEL® to the gauze so an increased VETIGEL® volume should be used. Application of VETIGEL® with gauze allows for spreading of the VETIGEL® within the wound and application of mild direct pressure to bleeding tissue to aid hemostasis.

7

Once hemostasis has been achieved VETIGEL® should not be removed. It can be bandaged or sutured over.





# ESSENTIAL TIPS FOR MASS REMOVALS

VETIGEL® may be used as an aid to providing hemostasis during dermal and subcutaneous mass removal followed by skin closure. VETIGEL® should be viewed as a temporary implant device (similar to absorbable suture) when used so aseptic technique should be followed for both the surgical site preparation and the procedure.



VETIGEL® should not be used as a substitute for routine vessel ligation and/or clapping/twisting techniques when a larger bleeding vessel can be identified. If there is generalized bleeding or a vessel cannot be identified, VETIGEL® can significantly aid in hemostasis. Bleeding should be slowed as much as possible during application by applying pressure or stretching the tissue.



Pooled blood should be removed with a sterile gauze. VETIGEL® can be applied to the wound by one of two methods, which may need 2-3 syringes depending upon the size of the wound: 1) Directly from the syringe(s) with a minimum thickness of 1cm, OR 2) Applied to a sterile saline damp gauze stack/laparotomy sponge that is then applied to the wound with gentle pressure.



Both application techniques require the VETIGEL® to be in place for at least 3 minutes, with or without gentle pressure, before wound closure can begin. If aseptic technique has not been compromised the closure can be complete. If aseptic technique is questioned, the distal or ventral most aspect of the closure should be left open for drainage while the majority of the wound is closed.



# ESSENTIAL TIPS FOR LACERATIONS

Lacerations should be dealt with similarly to mass removal procedures where possible contamination has occurred. The laceration should be prepared, debrided and larger identified bleeding vessels ligated and/or clamped and twisted.



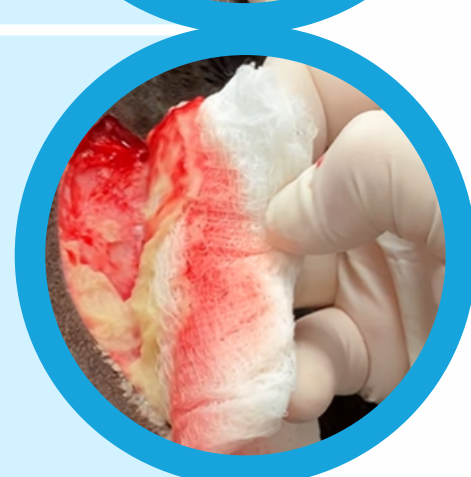
VETIGEL® can then be used, just prior to closure, to aid in controlling any remaining bleeding. VETIGEL® can be applied to the wound by one of two methods, which may need 2-3 syringes depending upon the size of the wound.



1) Directly from the syringe(s) with a minimum thickness of 1cm, **OR** 2) Applied to a sterile saline damp gauze stack/laparotomy sponge that is then applied to the wound with gentle pressure.



Both application techniques require the VETIGEL® to be in place for at least 3 minutes, with or without gentle pressure, before wound closure can begin. A small distal or ventral drainage site should be left open along the suture line to allow for drainage from the contaminated wound.



# ESSENTIAL TIPS FOR ENUCLEATION (STANDING)

After eye removal and prior to closure, sterile dry gauze or a laparotomy sponge should be applied within the orbit to fill it. Sterile saline dampened gauze or a laparotomy sponge, of similar size to the dry packing, should be prepared with VETIGEL® on it.



The new packing with VETIGEL® should be applied into orbit immediately after removal of the dry packing. Mild to moderate pressure should be applied for 3-5 minutes. An average sized horse will need 2 to 3 x 5ml syringes. It is better to apply more rather than less VETIGEL®.



The gauze or laparotomy sponge applied over the VETIGEL® should be gently removed after 3-5 minutes. The goal is to disturb the VETIGEL® as little as possible on the bleeding tissues. When the packing is removed some of the VETIGEL® can be expected to adhere to the damp packing.



Any VETIGEL® remaining in the orbit should be left untouched. The eyelids can then be sutured closed. If the bleeding has been controlled tension on the suture line will be minimal.





# ESSENTIAL TIPS FOR CASTRATION

VETIGEL® can be used to aid bleeding control for castration procedures in horses. If there is concern regarding bleeding from an identifiable vessel direct suture ligation or vessel twisting (to induce spasm and constriction) should be used first.

If direct techniques are not successful or a vessel cannot be identified, or numerous smaller vessels are the cause, then VETIGEL® can be used to significantly aid hemostasis. A stack of sterile gauze or a laparotomy sponge should be placed to provide compression and remove any pooling blood.

VETIGEL® syringe contents should be placed onto sterile saline soaked gauze or laparotomy sponge and applied directly to the bleeding region immediately after the previous packing is removed; this may need 2-3 VETIGEL® syringes depending upon the size of the bleeding area. Gentle pressure should be applied for a few minutes.

Alternatively, if there is a focal area of bleeding VETIGEL® can be applied directly to the site from the syringe or syringes. If the bleeding is controlled no gauze pressure is needed. This should aid in stopping the bleeding. For a regular castration the scrotum can be left open, or it can be closed routinely for a castration with scrotal ablation and closure.



# ESSENTIAL TIPS FOR FOOT/HOOF SURGERIES

For hoof surgeries, VETIGEL® can be used to help control bleeding from the sensitive corium, sensitive lamina and bone. Bleeding should be controlled with a tourniquet prior to VETIGEL® application. Pooled blood should be removed.



VETIGEL® should be applied directly from the syringes to the tissues. It is essential that an adequate thickness (1cm minimum) of VETIGEL® is applied to cover all the potential areas of hemorrhage, which may need 2-3 syringes.



The VETIGEL® should be covered with a damp saline gauze prior to application of an inner mild compression bandage. A large protective ball bandage should then be applied over the inner bandage.



The tourniquet can be gently released once the VETIGEL® has been in place for at least 5- 7 minutes. Once the tourniquet has been released the horse should be left to stand quietly for at least another 5-7 minutes before being moved. Wait 24-48 hours before changing the dressing.

