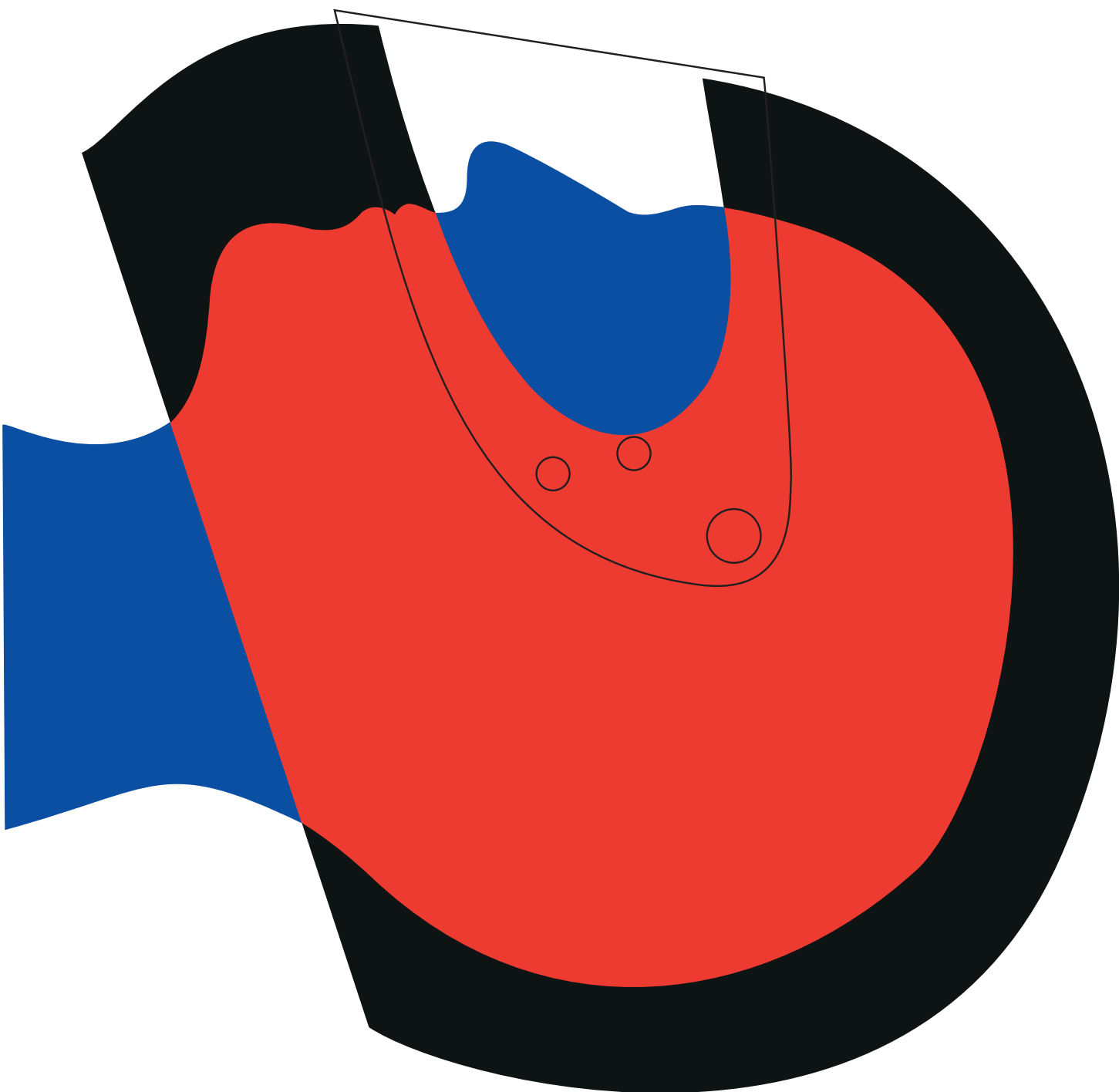


Techniques of Helmet Removal from Injured Patients

American College of Surgeons
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Helmet Removal from Injured Patients

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Types of Helmets

Full face coverage—motorcycle, auto racer



Full face coverage—motocross



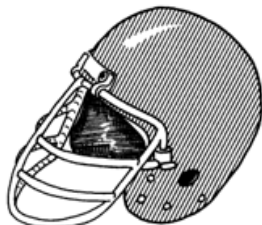
Partial face coverage—motorcycle, auto racer



Light head protection—bicycle, kayak



Football



Helmet Removal

The varying sizes, shapes, and configurations of motorcycle and sports helmets necessitate some understanding of their proper removal from victims of motorcycle crashes. The rescuer who removes a helmet improperly may unintentionally aggravate cervical spine injuries.

The Committee on Trauma believes that physicians who treat the injured should be aware of helmet removal techniques. A gradual increase in the use of helmets is anticipated, because many organizations are urging voluntary wearing of helmets, and some states are reinstating their laws requiring the wearing of helmets.



1

One rescuer maintains inline immobilization by placing her hands on each side of the helmet with the fingers on the victim's mandible. This position prevents slippage if the strap is loose.



2

A second rescuer cuts or loosens the strap at the D-rings.



3

The second rescuer places one hand on the mandible at the angle, the thumb on one side, the long and index fingers on the other. With his other hand, he applies pressure from the occipital region. This maneuver transfers the inline immobilization responsibility to the second rescuer.



4

The rescuer at the top moves the helmet. Three factors should be kept in mind:

- The helmet is egg shaped and therefore must be expanded laterally to clear the ears.
- If the helmet provides full facial coverage, glasses must be removed first.
- If the helmet provides full facial coverage, the nose may impede removal. To clear the nose, the helmet must be tilted backward and raised over it.



5

Throughout the removal process, the second rescuer maintains inline immobilization from below to prevent unnecessary neck motion.



6

After the helmet has been removed, the rescuer at the top replaces her hands on either side of the victim's head with her palms over the ears.



7

Inline immobilization is maintained from above until a backboard is in place and a cervical immobilization device (collar) is applied.

Summary

The helmet must be maneuvered over the nose and ears while the head and neck are held rigid.

- Inline immobilization is first applied from above.
- Inline immobilization is applied from below by a second rescuer with pressure on the jaw and occiput.
- The helmet is removed.
- Inline immobilization is reestablished from above.