Citation: Raffi Gurunluoglu, MD, PhD, Mark Glasgow, DDS, Jamie Arton, PA-C, and Michael Bronsert, PhD “Retrospective analysis of facial dog bite injuries at a Level I trauma center in the Denver metro area” Trauma Acute Care Surg. 1294 Volume 76, Number 5

Methods: The authors studied 75 consecutive patients presenting to a single trauma center between 2006-2012. Their encounters were retrospectively reviewed. Location and number of wounds, breed of dog, relationship to injured person, duration of time between repair and initial injury, type of repair, and antibiotic usage were all recorded. Endpoints were wound infections, need for surgical revision, and patient satisfaction.

Results: From the 75 consecutive patients, 98 wounds were identified in the head and neck region and repaired. There was a predominance of pediatrics (n=46) vs adults (n=29). 12 dog breeds were identified as being involved. No relationship between dog breed and number of wounds was noted. German Shepherds and Pitbulls were tied for the most injuries at 11 each. This was followed by Bullmastiff, ChowChow, Doberman, Husky, Labrador, Retriever, Rottweiler, Australian Shepherd, Terrier, Akita, and unknown. Time between injury and repair averaged 13 hours with a range from 4-72 hrs. 10 wounds required grafting. 25 wounds required use of a flap. 3 patients required replantation and revascularization of partial amputated lips (n=2) and cheek (n=1). 100 % of patients received empiric antibiotics, and there was only 1 postoperative infection. Only 52 patients received satisfaction scores. 40 were satisfied with the outcome, 5 were somewhat satisfied, and 7 were neutral.

Conclusion: Ideal treatment of dog bite injuries to the neck and face involve plastic surgery in a timely manner. This should lead to better outcomes cosmetically, leading to higher patient satisfaction scores, as well as less need of revision, less time until definitive repair, and availability for advanced replantation and flap procedures not available to other disciplines involved in the care of trauma patients.

Discussion: Dog bite injuries are a relatively common complaint for patients presenting to acute care facilities. It is important to identify those that require definitive repair with plastic surgery to help improve cosmesis, infection rates, and proper follow up care, as well as increasing patient satisfaction with medical care. Serious dog bite injuries occur involving a variety of dog breeds, and breed alone is not a significant risk factor for serious bite injury.