Juvenile Hip Dysplasia Update

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Along with injury to the cranial cruciate injury, canine hip dysplasia (HD) constitutes one of the most commonly encountered maladies in small animal orthopedic practice. Despite this, honest practitioners will admit that they frequently struggle to know the correct answers to clients' questions about prognosis, treatment recommendations, and etiology. This presentation will review some of what we know and don't know in these three areas.

Hip dysplasia is a heritable disease, but it is polygenetic with strong environmental influences. This has complicated efforts to reduce the incidence of the disease in the population and also makes finding ideal diagnostic tests more challenging. It is not always a straight forward process to identify animals that should or should not be bred with regard to their ability to pass on this syndrome. Such factors as exercise, diet, and housing can influence the expression of disease. A recent study suggested the benefits of moderate activity but the harmful effects of stairs for example. Additionally, the benefit of appropriate diets, particularly with regard to Calcium has been shown.

Obviously, the earlier HD can be diagnosed, the better for the practitioner. Dogs are born with normal hips, and the manifestations of the disease become apparent at varying times. Although several palpation and ultrasound methods have been explored, radiographs remain the most accepted and reliable tool for diagnosis of HD. Currently, a hips-extended, ventro-dorsal projection ("OFA" style) or a distraction view (Penn HIP) are commonly used. Both have their place in veterinary practice and should be used appropriately.

The most appropriate treatment for HD in a young dog is rarely a black and white decision. Options such as Juvenile Pubic Symphysiodesis, Triple (or Double) Pelvic Osteotomy, Femoral Head and Neck Excision, and Total Hip Replacement will be discussed. Because osteoarthritis is not typically a major component of the syndrome in the juvenile dog, its management will not be covered in detail.