First, it is only described how completeness of RAA occlusion was assessed. In the Results section, however, completeness of LAA and RAA occlusion proved by dye injection is reported. When and by which method was LAA occlusion confirmed during the procedure?

Second, the pathoanatomic description and figures are confined to the 12-week findings. What were the findings in the dogs 1 and 2 weeks after LAA occlusion? Were thrombi detected at the occlusion site?

Finally, scars at the occlusion site might become arrhythmogenic foci. Were the dogs investigated for arrhythmias after appendage occlusion?

The LAA is known as a site of natriuretic peptide release and is known to play a hemodynamic role in pressure and volume overload. Thus it would be of interest to know whether hemodynamic studies have been carried out and whether levels of natriuretic peptides were measured before and after LAA occlusion. The LAA contributes considerably to left atrial function, and left atrial function is impeded after LAA occlusion. Scar formation and necrotic tissue of the occluded LAA might additionally deteriorate left atrial function. Thus it would be interesting to know whether changes in left atrial size, morphology, and function had been measured and whether signs of heart failure were detected after LAA occlusion.

It is unknown how rapidly the hemodynamic consequences of LAA occlusion will occur. Thus it would be wise to follow the animals for a longer period than only 12 weeks. Furthermore, concerns about the biocompatibility of silicone, which is known to induce loose, fibrous capsules formed around silicone breast implants with special focus on local immune reactions.

In conclusion, early thrombus formation, assessment of complete LAA occlusion, potential arrhythmogenicity, short- and long-term hemodynamic consequences, tolerability of silicone, and biocompatibility of the described procedure have to be studied more thoroughly before applying the silicone band for LAA occlusion in human subjects. It should be considered also that LAA occlusion does not prevent cardioembolism in atrial fibrillation or other conditions.

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