and the maximum amplitude of respectively unipolar and bipolar electrograms. Voltage

target sites for RFCA are identified by endocardial mapping of the activation sequence and
demonstrate the feasibility of precise, remote control of the MC by the MNS/CAS that
to all 6 pulmonary veins in each animal. Post-mortem examination showed no evidence
of perforation or injury related to catheter navigation. CONCLUSIONS: These results
as the CAS retracted the catheter back to the IVC. Next, the MC was inserted into the
cuspid annulus and a series of radiofrequency energy applications created a linear lesion

catheter procedure, 2) to evaluate the usefulness of NCM to identify and close discontinu-
ities in linear lesions, 3) to assess the impact of linear lesion continuity on ablation suc-
cess rate of 71% (10/14 pts). Conclusions: The intraoperative radiofrequency ablation
had more than 1 gaps identified after the initial ablation procedure. Successful ablation of
catheter mapping was per-
formed. With contact mapping a discontinuity of linear lesion was identified by a localized
loss of double potentials in 27 of the 58 gaps (47%). In the remaining 31 gaps (53%)
interpretation of contact mapping was difficult because of the diminished amplitude of
local electrograms. Catheter ablation was guided by NCM until complete conduction
block was observed. During follow-up of 12 ± 7 months, 6/14 pts (43%) remained in sinus
rhythm without antiarrhythmic drugs (in 5 of the 6 no gap was identified during offline
analysis) and an additional 4 pts were maintained in sinus rhythm with antiarrhythmic
drugs (in all 4 pts 1 gap was identified during offline analysis), resulting in an overall suc-
cess rate of 71% (10/14 pts). Conclusions: The intraoperative radiofrequency ablation
strategy could be translated into a catheter based procedure using NCM. The overall
success rate was 43% without and 71% with additional antiarrhythmic drugs. All pts with
out gaps during offline analysis were free of recurrence. All pts with a recurrence of CAF
had more than 1 gaps identified after the initial ablation procedure. Successful ablation of

catheter-based, left atrial (LA) ablation procedure was performed using non-contact-
mapping (NCM) in 14 patients (pts) with chronic atrial fibrillation (CAF). The LA lesion
group Procedure RF RF duration Fluoroscopy Time

<table>
<thead>
<tr>
<th>Group</th>
<th>Procedure</th>
<th>RF</th>
<th>RF duration</th>
<th>Fluoroscopy Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uni</td>
<td>n=45</td>
<td>30.5±15.9</td>
<td>10.0±5.6</td>
<td>5.9±3.2</td>
</tr>
<tr>
<td>LS (15:RS 16:14)</td>
<td>P value</td>
<td>&lt;0.05</td>
<td>&lt;0.01</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>