

CRM Device and Lead Management Follow-Up

DEVICE THERAPY GUIDELINES

ACC / AHA / HRS

ICD Therapy

- NYHA Class II, LVEF $\leq 30\%$
- NYHA Class III, IV, LVEF $\leq 35\%$
- >40 days post-MI
- Nonischemic DCM

CRT-D Therapy

- NYHA Class III, IV
- LVEF $\leq 35\%$
- QRS ≥ 120 ms

Patient meets guideline criteria.
Consider referral for device upgrade:
 Yes No (please check one)

LEAD MANAGEMENT CHECKLIST

HRS / AHA

Infection

At Generator Site:

- Erythema
- Pain
- Swelling
- Warmth
- Tenderness
- Drainage
- Skin Ulceration
- Generator/Lead Erosion

Systemic:

- Chills
- Fever ($>38^{\circ}\text{C}$)
- Malaise
- Anorexia
- Nausea
- Sweating
- Hypotension (systolic <90 Hg)
- Murmur on examination
- Symptomatic heart failure

Chronic Pain

- At Device or Lead insertion site
- Persistent pain not manageable by medical or surgical techniques

Device Change Out or Upgrades: Pacemaker to ICD/Bi-V

- Possible Venous Occlusion (Order Venogram)
- Potential Redundant RV Pacing Lead
- Capped/abandoned lead

Patient meets indication criteria.
Consider referral for lead extraction:
 Yes No (please check one)

Possible Lead Malfunction

- Advisory Leads (leads with high risk of failure)
- Change in Impedance (Shock or Pacing)
- Poor Sensing (P/R waves)
- High Thresholds (>5.0 Volts)

NAME _____

DATE _____

CRM Device and Lead Management Follow-Up

DEVICE THERAPY GUIDELINES

ACC / AHA / HRS

ICD Therapy

- NYHA Class II, LVEF $\leq 30\%$
- NYHA Class III, IV, LVEF $\leq 35\%$
- >40 days post-MI
- Nonischemic DCM

CRT-D Therapy

- NYHA Class III, IV
- LVEF $\leq 35\%$
- QRS ≥ 120 ms

Patient meets guideline criteria.
Consider referral for device upgrade:
 Yes No (please check one)

LEAD MANAGEMENT CHECKLIST

HRS / AHA

Infection

At Generator Site:

- Erythema
- Pain
- Swelling
- Warmth
- Tenderness
- Drainage
- Skin Ulceration
- Generator/Lead Erosion

Systemic:

- Chills
- Fever ($>38^{\circ}\text{C}$)
- Malaise
- Anorexia
- Nausea
- Sweating
- Hypotension (systolic <90 Hg)
- Murmur on examination
- Symptomatic heart failure

Chronic Pain

- At Device or Lead insertion site
- Persistent pain not manageable by medical or surgical techniques

Device Change Out or Upgrades: Pacemaker to ICD/Bi-V

- Possible Venous Occlusion (Order Venogram)
- Potential Redundant RV Pacing Lead
- Capped/abandoned lead

Patient meets indication criteria.
Consider referral for lead extraction:
 Yes No (please check one)

Possible Lead Malfunction

- Advisory Leads (leads with high risk of failure)
- Change in Impedance (Shock or Pacing)
- Poor Sensing (P/R waves)
- High Thresholds (>5.0 Volts)

NAME _____

DATE _____

CRM Device and Lead Management Follow-Up

DEVICE THERAPY GUIDELINES

ACC / AHA / HRS

ICD Therapy

- NYHA Class II, LVEF $\leq 30\%$
- NYHA Class III, IV, LVEF $\leq 35\%$
- >40 days post-MI
- Nonischemic DCM

CRT-D Therapy

- NYHA Class III, IV
- LVEF $\leq 35\%$
- QRS ≥ 120 ms

Patient meets guideline criteria.
Consider referral for device upgrade:
 Yes No (please check one)

LEAD MANAGEMENT CHECKLIST

HRS / AHA

Infection

At Generator Site:

- Erythema
- Pain
- Swelling
- Warmth
- Tenderness
- Drainage
- Skin Ulceration
- Generator/Lead Erosion

Systemic:

- Chills
- Fever ($>38^{\circ}\text{C}$)
- Malaise
- Anorexia
- Nausea
- Sweating
- Hypotension (systolic <90 Hg)
- Murmur on examination
- Symptomatic heart failure

Chronic Pain

- At Device or Lead insertion site
- Persistent pain not manageable by medical or surgical techniques

Device Change Out or Upgrades: Pacemaker to ICD/Bi-V

- Possible Venous Occlusion (Order Venogram)
- Potential Redundant RV Pacing Lead
- Capped/abandoned lead

Patient meets indication criteria.
Consider referral for lead extraction:
 Yes No (please check one)

Possible Lead Malfunction

- Advisory Leads (leads with high risk of failure)
- Change in Impedance (Shock or Pacing)
- Poor Sensing (P/R waves)
- High Thresholds (>5.0 Volts)

NAME _____

DATE _____

CRM Device and Lead Management Follow-Up

DEVICE THERAPY GUIDELINES

ACC / AHA / HRS

ICD Therapy

- NYHA Class II, LVEF $\leq 30\%$
- NYHA Class III, IV, LVEF $\leq 35\%$
- >40 days post-MI
- Nonischemic DCM

CRT-D Therapy

- NYHA Class III, IV
- LVEF $\leq 35\%$
- QRS ≥ 120 ms

Patient meets guideline criteria.
Consider referral for device upgrade:
 Yes No (please check one)

LEAD MANAGEMENT CHECKLIST

HRS / AHA

Infection

At Generator Site:

- Erythema
- Pain
- Swelling
- Warmth
- Tenderness
- Drainage
- Skin Ulceration
- Generator/Lead Erosion

Systemic:

- Chills
- Fever ($>38^{\circ}\text{C}$)
- Malaise
- Anorexia
- Nausea
- Sweating
- Hypotension (systolic <90 Hg)
- Murmur on examination
- Symptomatic heart failure

Chronic Pain

- At Device or Lead insertion site
- Persistent pain not manageable by medical or surgical techniques

Device Change Out or Upgrades: Pacemaker to ICD/Bi-V

- Possible Venous Occlusion (Order Venogram)
- Potential Redundant RV Pacing Lead
- Capped/abandoned lead

Patient meets indication criteria.
Consider referral for lead extraction:
 Yes No (please check one)

Possible Lead Malfunction

- Advisory Leads (leads with high risk of failure)
- Change in Impedance (Shock or Pacing)
- Poor Sensing (P/R waves)
- High Thresholds (>5.0 Volts)

NAME _____

DATE _____