In addition, a progressive decline in maximum heart rate occurs with age, although the resting heart rate normally remains unchanged. Intrinsic heart rate declines 5–6 beats/min for each decade of age. However, the constancy of resting heart rate is associated with a gradual decrease in parasympathetic tone and a transition to predominant sympathetic tone by the ninth decade.

DIAGNOSIS OF SA NODAL DISEASE

Intrinsic sinus node disease is sometimes referred to as sick sinus syndrome or sinus node dysfunction (SND) and can manifest as fatigue, exercise intolerance, or syncope resulting from either reduced heart rate or pauses. Electrocardiographic recording plays a central role in the diagnosis and management of SA node dysfunction. The correlation between symptoms and slow heart rate or pauses is essential in determining whether bradycardia may be considered pathologic and necessitating intervention. Baseline ECG can detect baseline sinus bradycardia but may not indicate symptom correlation in certain settings. To address the limitations of the resting ECG, longer-term recording employing mobile telemetry devices such as Holter monitors or mobile cardiac telemetry can also be helpful in correlating symptoms with rate abnormalities **(Fig. 244-2)**.