UK and Ireland Neuroendocrine Tumour Society

## UKINETS bitesize guidance Carcinoid Heart Disease

PAGE 1 - SCREENING & INVESTIGATION ALGORITHM



This graphic provides an algorithm for how patients with metastatic (serotonin-producing neuroendocrine tumours (NETs) should be screened and assessed for carcinoid heart disease (CHD), including, importantly, when to refer to cardiology. f/u = follow up; NT-proBNP = N-terminal pro-B-type natriuretic peptide. Credit for this table: Diagnosing and Managing Carcinoid Heart Disease in Patients With Neuroendocrine Tumors: An Expert Statement Davar J; Connolly H; Caplin M et al. J Am Coll Cardiol. 2017; 69: 1288-304



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UKINETS bitesize guidance Carcinoid Heart Disease Notes

Majority of neuroendocrine tumours causing CHD will have liver metastases. However, ovarian and retroperitoneal NET lesions can cause CHD without disease elsewhere.

Transthoracic Echocardiography is preferred diagnostic modality as widely available and well validated. Other echocardiography techniques, such as 3D, colour flow or spectral doppler, may give additional information on pulmonary valve status. Contrast studies may help in detecting patent Foramen Ovale.

Other, rare, cardiac manifestations of neuroendocrine cancer such as cardiac or pericardial metastases may also be detected. These should be managed through the specialist neuroendocrine multidisciplinary team including cardiology and cardiac surgery.

Severity of carcinoid heart disease can change over short periods of time ( < 6 months ). Frequency of echocardiography surveillance of CHD is suggested 6 monthly for mild CHD and 3 – 6 monthly in moderate/severe CHD. Patient should be monitored in conjunction with a Centre with expertise in CHD.



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**UKINETS** bitesize guidance **Carcinoid Heart Disease** References

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- 3. Risk factors for the development and progression of carcinoid heart disease. Bhattacharyya S, Toumpanakis C, Chilkunda D. et al. Am J Cardiol 2011; 107:1221-6
- 4. The association of a panel of biomarkers and the presence and severity of carcinoid heart disease: a cross sectional study. Dobson R, Burgess MI, Banks M et al. PLoS One 2013;8:e73679
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