

## WCC 2016-103 : Treatment Challenges In A Case Of Breast Cancer With Wolff-Parkinson-White Syndrome And Congenital Retinitis Pigmentosa

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**Background:** WPW is caused by the presence of an abnormal accessory electrical conduction pathway between the atria and the ventricles. Electrical signals travelling down this abnormal pathway (known as the bundle of Kent) may stimulate the ventricles to contract prematurely, resulting in a unique type of supraventricular tachycardia. Retinitis pigmentosa is an inherited, degenerative eye disease that causes severe vision impairment due to the progressive degeneration of the rod photoreceptor cells in the retina. RP may be: (1) Non-syndromic, (2) Syndromic, with other neurosensory disorders, developmental abnormalities, or complex clinical findings, or (3) Secondary to other systemic diseases. Inheritance patterns of RP have been identified as autosomal dominant, autosomal recessive, X-linked, and mitochondrially acquired.

**Case Report:** A 56 yr old female, unmarried, graduate, postmenopausal since 5 yrs , presented with a lump in the left breast in February 2015. She was a known case of retinitis pigmentosa (both eyes). She had a family history of carcinoma breast in her grandmother. She had an episode of palpitations in 1994 and was diagnosed to have Wolff-Parkinson-White (WPW) syndrome for which she underwent Radiofrequency Ablation in 1995 and is asymptomatic since then. She also had dental abnormalities since childhood for which multiple extractions were done and artificial dentures were applied since 18 years of age. She was diagnosed with Irritable Bowel Syndrome since 8 years and is a known hypertensive since 4 years. She was evaluated with Mammography which showed irregular hypo echoic lesion in the left breast. FNAC from the left breast lump and axillary lymph node revealed ductal carcinoma with metastatic deposit in left axilla. Biopsy showed Invasive lobular carcinoma, positive for ER/PR and negative for Her2neu. PETCT showed enhancing lesion in upper outer quadrant of left breast measuring 1.5x1.5x1.2 cm which was predominantly intra parenchymal with focal infiltration of the underlying pectoralis major muscle and anteriorly extending into subcutaneous tissues with multiple left axillary nodes. Clinically staged as cT4aN3M0. She received neoadjuvant chemotherapy with 4 cycles of Adriamycin 60 mg + Cyclophosphamide 600 mg. She underwent Left mastectomy MRM + level III axillary clearance. Post op histopathology revealed invasive ductal carcinoma in central quadrant with DCIS component and lymphovascular invasion with free margins, 26 lymph nodes out of 26 dissected showed metastasis, ypT1N3. She then received adjuvant chemotherapy with 12 cycles of weekly Taxol 100mg. ECG and 2D Echo, both baseline and during chemotherapy were within normal limits. She was treated with adjuvant radiation to left chest wall and left supraclavicular fossa, 40 Gy in 15 fractions, 2.667 Gy per fraction in November 2015. Mean heart dose was 4.205 Gy. Patient tolerated treatment well, did not develop any

significant toxicities to radiotherapy and chemotherapy and was started on T.Letrozole 2.5 mg OD and is doing well.

**Conclusions:** Breast cancer in a patient with Wolff-Parkinson-White(WPW) syndrome and congenital retinitis pigmentosa has not been previously reported in literature and presents unique challenges in treatment.