

# European Respiratory Society Annual Congress 2013

**Abstract Number:** 7057

**Publication Number:** P4978

**Abstract Group:** 4.3. Pulmonary Circulation and Pulmonary Vascular Disease

**Keyword 1:** Bronchiolitis **Keyword 2:** Pulmonary hypertension **Keyword 3:** Spirometry

**Title:** Effect of allogenic bone marrow transplant on cardiac function and pulmonary vascular pressure

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**Body:** Aims and Objectives: Pulmonary infections, fibrosis and bronchiolitis obliterans (BOS) in post bone marrow transplant (BMT) are frequent, cardiac and pulmonary vascular involvement in post BMT has not been studied well. Materials and Methods: Prospective evaluation of ten patients with diagnosis of post BMT/Graft-Versus-Host Disease (GVHD) syndrome and BOS. Patient's echocardiogram were evaluated for cardiac function and pulmonary artery pressure, pulmonary function test (PFT) were evaluated for severity of lung disease, standard ATS Criteria. Results: All patients had normal cardiac function and normal pulmonary artery pressure prior to BMT. 7/10 (70%) patients developed Lt. ventricular dysfunction. 5/10 (50%) patients developed pulmonary hypertension (PHT).

Echo s/p BM TX

NO.	EF	LV Impairment	Lt. atrium	Rt Vent	RSVP/PAP
	pre/post	pre/post	pre/post	pre/post	pre/post
1	>55/45	NO/NO	N/N	N/N	N/40
2	>55/55	NO/NO	N/N	N/N	N/N
3	>55/35	NO/Y	N/mildly dilated	N/mildly dilated	N/40
4	>55/40	NO/Y	N/N	N/mildly dilated	N/40
5	>55/45	NO/Y	N/N	N/N	N/N
6	>55/48	NO/NO	N/N	N/N	N/N
7	>55/35	NO/Y	N/mildly dilated	N/mildly dilated	N/40
8	>55/35	NO/Y	mildly dilated/mildly dilated	N/N	N/50
9	>55/55	NO/NO	N/N	N/N	N/N
10	60/60	NO/NO	N/N	abn/N	N/N

Cardiac and pulmonary vascular involvement was independent of severity of lung disease on PFT.

Discussion: Our study shows significant cardiac dysfunction with PHT in post BMT patients. It could be related to pre transplant induction therapy or part of GVHD, this aspect should be considered in patients evaluation and management.

Conclusion: Left ventricular dysfunction and PHT is a significant problem in post BMT patients. Its causes and potential management needs further evaluation.