

Hypertensive nephropathy is widespread in age group of 20-60 i.e adults.

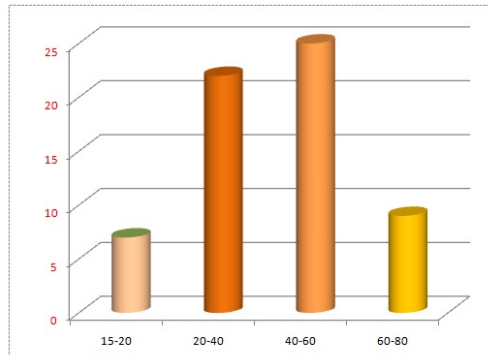


Fig.2: comprised of age group ranging 15-80 years. The following graph shows the distribution of hypertensive nephropathy in various age groups.

Table 3

Pts. With family history of hypertension	8
Pts don't have family history of hypertension	56

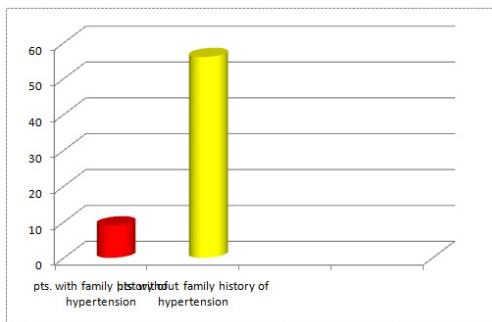


Fig.3: shows # of pts with family history of hypertension and pts. having no family history of hypertension.

Table 4

Pts. With congenital hypertension	8
Pts. Without congenital hypertension	56

Table 5

No. of pts. Under dialysis	Tim period of dialysis
18	Below 1 year.
13	1 year
9	2 years
11	3 years
3	4 years
2	5 years
2	6 years
1	7 years
1	8 years
1	9 years
3	3 years

Table 6

Pts. have complication during dialysis	46
Pts. don't have complication	17

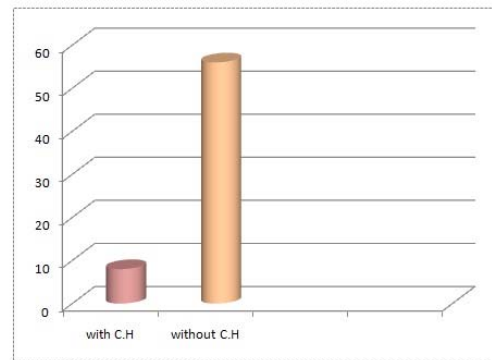


Fig.4: shows the # of patients with congenital hypertension and without congenital hypertension

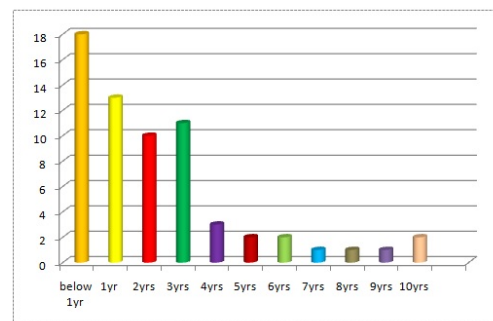


Fig.5: shows no of pts and time period of dialysis

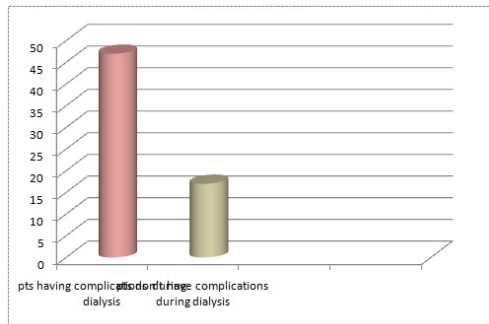


Fig.6: shows the # of pts. Having complications during dialysis and those which don't have complications.

Discussion:

Hypertensive nephropathy is a kidney disease that occurs as a result of high blood pressure this disease is characterized by the damage to the vasculature of kidneys as blood pressure increases.

There are two types of hypertensive nephropathy these are benign nephrosclerosis & malignant nephrosclerosis benign nephrosclerosis is most present in people over 6 years old while the rare malignant nephrosclerosis occurs only in 1 to 5 percent of people with hypertension.

Blood tests are needed in diagnosis of hypertensive nephropathy to determine the conditions of kidneys & their functioning this may require collection of urine for 24 hours to measure the extent of the kidney disease that is connected with high blood pressure.

The most common drugs used are Thiazide, Frusemide, Hydralazine & Diurlics these drugs can reduce the blood pressure rapidly & can save kidney function If taken immediately if worse comes to worst meaning if the kidney failure is not controlled by the conventional ways dialysis may be required. Dialysis is not a cure if a person 'S' kidneys are temporarily damaged dialysis give them a rest & chance to recover but for chronic and stage kidney disease a kidney

transplant is only the long term solution that frees the patient from dialysis without dialysis the health. of such patients will further deteriorate making life miserable renal failure mostly occur in the early it is common in the later stages of hypertension if the disease is not aggressively managed early persistent hypertension also results in renal failure.

All the visited hospitals have similar setup for the treatment of renal failure patients but the dialysis machines are different. The latest one is being used in Jinnah Hospital.

In our study we took 64 patient randomly 36 male & 28 females with different age groups.

According to our study hypertensive nephropathy is more in patients age 40-60 (25-Patients) then 20-40 (22-Patients) then 60-80 (9-Patients) then 15-20 (7-Patients)

The health care team in every hospital is efficient and diligent

It provides services to patients instantly and round the clock pharmacist is integral part of the team but his role confined to inventory checking in practice he performs no role of clinical pharmacist among the three hospital we have visited (Services, Jinnah and Myo) none have clinical pharmacist in direct interaction with patient which creates hurdle in proper management programme and proper therapeutic outcomes of therapy ultimately decreasing patient quality of life.

Conclusion:

Hypertensive nephropathy is a kidney disease that occurs as a result of high blood pressure & results in damage of kidney. Basically there are two types of hypertensive nephropathy benign & malignant. In benign there is less chance of kidney damage but in malignant aggressive ways to lower blood pressure is needed because damaging to kidney is more rapid

patient should be hospitalized & given I/V therapy to prevent kidney damage from above it is concluded that hypertensive nephropathy like most other disease can be prevented if we take active steps in guarding our health such as maintaining a proper diet, regular exercise and treatment decision should be of course be individualized based on the clinical characteristics of the patient including comorbidities as well as tolerability, personal preference and cost & elderly hypertensive patients blood pressure should be lowered gradually to avoid complications.

Acknowledgement:

Up and above everything else, all praises are for Almighty Allah alone, the omnipotent, the omnipresent, the most merciful and the most beneficent. After Allah his beloved prophet Hazrat Muhammad (saw) the most perfect and exalted, who is forever a source of guidance and knowledge for humanity as a whole. I would like to wish my sincere thanks to honourable Prof. Dr. Bushra Mateen The Vice Chancellor of L.C.W.U and respectable Miss. Shaista Vine who has provided me with the opportunity to work Myo Hospital And Services and Jinnah Hospital. I dream it a rare opportunity and source of pleasure in expressing our profound and affable gratitude to my Head of dept. And project incharge Dr. Khawaja Tahir Mehmood, the backbone of entire project. His constructive criticism enabled me to treat this work objectively and comprehensively. I want to acknowledge the tremendously helpful, supportive, creative contribution of my project co-supervisors Miss. Fatima, Miss. Mariam, Miss. Munazza, and

all other teachers whose imaginations and positive attitude helped me out of valleys.

I acknowledge the helpfulness of staff of MYO especially Dr. IJAZ KHARRL Registrar of Urology ward and SERVICES Hospital Dr. Khalid Butt and especially hospital pharmacists, their friendly behavior gave us so much confidence and comfort. Lastly, this work would not have been completed without the support of my family and my project partner Miss. Muzna Mujeeb who stood by me in all testing time.

References:

- [1] Hypertension is a silent killer so it should be checked and monitored properly. H Wong, K Mylrea, J Feber, A Drukker, G Filler. What is Hypertensive Nephropathy? Hypertensive nephropathy is a kidney disease. hypertensive-nephropathy/.70, 585-590 (21 June 2006).
- [2] P Palatini, P Mormino, F Dorigatti, M Santonastaso, L Mos, R De Toni, M Winnicki, M Dal Follo, T Biasion, G Garavelli, et al. Glomerular hyperfiltration predicts the development of microalbuminuria in stage 1 hypertension: The HARVEST. *Kidney International* 70, 578-584 (21 June 2006).
- [3] C Lefaucheur, B Stengel, D Nochy, P Martel, G S Hill, C Jacquot, J Rossert [Hypertensive nephropathy: pathogenesis, diagnosis and treatment. *Kidney International* 70, 1510-1517 (30 August 2007).
- [4] G Wolf. *Kidney International* 70, 1914-1919 (20 September 2008).
- [5] D Batlle, P Ramadugu, M J Soler. Progress in retarding the progression of advanced chronic kidney disease. *Grounds for optimism* 70, S40-S44 (16 November 2009).
- [6] M Tomaszewski, F J Charchar, C Maric, J McClure, L Crawford, W Grzeszczak, N Sattar, E Zukowska-Szczechowska, A F Dominiczak. Glomerular hyperfiltration. A new marker of metabolic risk 71, 816-821 (28 February 2009).
- [7] P J Williams, L O Kurlak, A C Perkins, H Budge, T Stephenson, D Keisler, M E

- [8] Symonds, D S Gardner .Hypertension and impaired renal function accompany juvenile obesity: The effect of prenatal diet. *Kidney International* 72, 279-289 (11 April 2010).
- [9] V M Campese, J Park .HMG-CoA reductase inhibitors and the kidney. *Healthylivingsense* 1215-1222 (9 May 2010).
- [10] N Sugano, S Wakino, T Kanda, S Tatematsu, K Homma, K Yoshioka, K Hasegawa, Y Hara, Y Suetsugu, T Yoshizawa, et al. T-type calcium channel blockade as a therapeutic strategy against renal injury in rats with subtotal nephrectomy . *Kidney International* 73, 826-834 (16 January 2010).
- [11] Vicente E Torres. Vasopressin in chronic kidney disease. an elephant in the room? 925-928 (15 October 2010).
- [12] Rajnish Mehrotra, Dulcie A Kermah, Isidro B Salusky, Myles S Wolf, Ravi I Thadhani, Yi-Wen Chiu, David Martins, Sharon G Adler, Keith C Norris. Chronic kidney disease, hypovitaminosis D, and mortality in the United States . *thefreedictionary* 977-983 (5 August 2010).
- [13] Simone Sanna-Cherchi, Pietro Ravani, Valentina Corbani, Stefano Parodi, Riccardo Haupt, Giorgio Piaggio, Maria L Degli Innocenti, Danio Somenzi, Antonella Trivelli, Gianluca Caridi, et al. Renal outcome in patients with congenital anomalies of the kidney and urinary tract . *thedoctorschanne* 176, 528-533 (17 June 2010).
- [14] Flávio Teles, Flávia G Machado, Bianca H Ventura, Denise M A C Malheiros, Clarice K Fujihara, Luís F F Silva, Roberto Zatz .Regression of glomerular injury by losartan in experimental hypertensive nephropathy . *Kidney International* 75, 72-79 (22 October 2010).
- [15] Satu Wedenoja, Timo Örmälä, Ulla B Berg, Stella F Edström Halling, Hannu Jalanko, Riitta Karikoski, Juha Kere, Christer Holmberg, Pia Höglund. The impact of sodium chloride and volume depletion in the chronic kidney disease of congenital chloride diarrhea. *hypertensive-nephropathy*1085-1093 (13 August 2010).
- [16] P Hart, G L Bakris .Calcium antagonists: Do they equally protect against kidney injury?. *Kidney International* 73, 795-796 (14 March 2010).
- [17] H Wong, K Mylrea, J Feber, A Drukker, G Filler . HNP1 - Hypertensive nephropathy. *ihop-net*585-590 (21 June 2010).
- [18] L O Kurlak, A C Perkins, H Budge, T Stephenson. Hypertensive Nephropathy – An Increasing Clinical Problem. *produkte.asp*279-289 (11 April 2010).
- [19] Y Suetsugu, T Yoshizawa. Hypertensive Nephropathy and the Gene for Angiotensin-Converting. *Kidney International* 73, 826-834 (24 January 2010)
- [20] M Dal Follo, T Biasion, G Garavelli, et al. Hypertensive nephropathy in Atenolol. *eHealthMe*578-584 (21 June 2010).
- [21] Rigas G Kalaitzidis . ACE inhibitors + ARB for diabetic and hypertensive nephropathy . *thefreelibrary*, 194-200 (12November 2010).