

CORONARY CARE UNIT AT SGNHC

– Dr. Roshan Raut

SGNHC, with the primary mission to provide Nepalese people high quality medical care for various types of cardiovascular diseases, has gained a good public faith. The critical care block has been established as one of the key section in this context. The 17 bedded critical care block has been divided into three sections, CCU (7 beds), MICU (5 beds) and STEP DOWN (5 beds), which has led the medical service to become more co-ordinated, specific and scientific. In MICU, cardiac patients other than acute coronary cases or life threatening arrhythmias are kept whereas stepdown serves as an intermediary care ward for CCU or MICU patients, once they become stable.

The acute coronary cases and life threatening arrhythmias are predominantly admitted in CCU. The delivery of care in the CCU is provided by utilizing a multidisciplinary approach. The 7 bedded CCU is well equipped with comprehensive central monitoring, central oxygen supply, 24 hour mobile X-ray, and 24 hour mobile echocardiography, due to which patient care has become more efficient and easier. On-call cardiologists stay in house 24 hours on top of resident doctors who are on duty. Consultations with other specialists and subsequent interventions are rendered as necessary. The medical staffs are not only well trained and efficient, but are also dedicated to excellence, compassion and integrity in patient care.

This article provides a brief outline of CCU admissions in the year 2004. As expected, there has been dramatic increment in the admissions of acute coronary syndromes (from 63 patients in 2001 to 408 patients in 2004), as shown in figure. Patients with acute coronary syndromes (ACS) and rhythm disturbances were predominantly admitted in CCU, comprising 60.7 and 17.4 percents respectively. The overall mortality of CCU admissions was 37 (5.5%) (table 1).

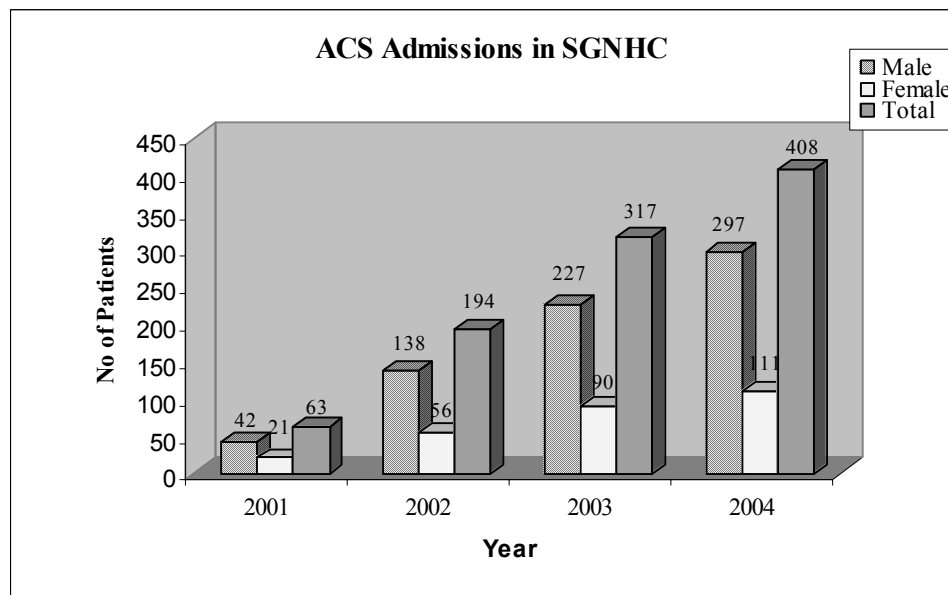


Table 1. Total Admissions in 2004

DIAGNOSIS	Admissions			Mortality		
	Male	Female	Total (%)	Male	Female	Total (%)
ACS	297	111	408(60.7)	19	7	26 (6.3)
ARRYTHMIAS	67	50	117(17.4)	0	0	0
OTHERS	104	43	147(21.8)	10	1	11(7.5)
Total	468	204	672	29	8	37(5.50)

Table 2. ACS admission pattern in 2004

DIAGNOSIS		TOTAL ADMISSION			STK RECEIVED			MORTALITY		
		Male	Female	Total (%)	Male	Female	Total (%)	Male	Female	Total (%)
S T E M I	Anterior	35	4	39 (19.59)	5	0	5	3	1	4
	Ext. Anterior	24	10	34 (17.08)	9	3	12	2	2	4
	Ant. Lateral	3	0	3 (1.5)	1	0	1	0	0	0
	Ant. Septal	16	5	21 (10.55)	3	2	5	0	0	0
	Inferior	57	8	65 (32.66)	22	2	24	7	1	8
	Posterior	1	0	1 (0.5)	0	0	0	0	0	0
	Lateral	1	0	1 (0.5)	1	0	1	0	0	0
	Inferior &Posterior	3	1	4 (2.01)	1	1	2	1	0	1
	Inferior & Lateral	8	3	11 (5.52)	6	1	7	1	0	1
	Posterior Lat.	1	0	1 (0.5)	0	0	0	0	0	0
	Inferior & Anterior	2	0	2 (1.0)	0	0	0	0	0	0
	Inferior Wall with RV Infarction	9	0	9 (4.5)	6	0	6	1	0	1
	Inferior, Posterior & Lateral	6	0	6 (3.01)	3	0	3	1	0	1
	Inferior &Posterior Wall With RV Infarction	1	1	2 (1.0)	0	1	1	0	1	1
Total STEMI	167(84)	32(16)	199(48.77)	57	10	67(33.66)	16	5	21(10.55)	
Unstable Angina	99(60)	67(40)	166(40.68)	----	-----	-----	1	1	2 (1.2)	
NSTEMI	31(72)	12(28)	43(10.53)	----	-----	-----	2	1	3 (6.9)	
Total ACS	297(73)	111(27)	408	----	-----	-----	19	7	26 (6.3)	

There were altogether 408 ACS cases admitted in 2004, out of which 199 (48.7%) were ST Elevation MI (STEMI), 43 (10.5%) were non ST elevation MI (NSTEMI) and rest 166 (40.6%) were Unstable angina. Male preponderance was clearly seen as 297 (73%) were male and only 111 (27%) were female. The overall mortality of ACS was 26 (6.3%). Out of 199 STEMI cases, 67 got STK (33.6%), which is higher as compared to the last year (26%). Overall mortality of STEMI was 21 (10.55%). Out of 67 patients who got STK, 6 died, so that mortality in STK group STEMI was 8.9% whereas that in non STK STEMI was 11.3%. There were 3 (6.9%) mortality in NSTEMI while 2 (1.2%) in Unstable angina (Table 2). The figures are comparable to the figures of west.

Rhythm disturbances were another bulk of patients admitted in CCU. The total number was 117 out of which 67 (58%) were male and 50 (42%) were female. Complete Heart

block and Sick sinus syndrome were the major cardiac conditions in that group. If indicated permanent pacemaker was implanted. Apart from ACS and rhythm disturbances, additional 21.8% admissions were mainly heart failure, hypertensive emergency, chest pain, syncope and for PTCA. There was high mortality in heart failure patients (23%, 9 died out of 39), because many of them were at end stage cardiomyopathy, presenting with cardiogenic shock or intractable VT. The two deaths so categorized in “miscellaneous”, (table 4), were aortic dissection and congenital heart disease with severe pulmonary hypertension.

Table 3. Cardiac Arrhythmias

DIAGNOSIS	Male	Female	Total	Percentage
Complete Heart Block	37	20	57	48.17
Sick Sinus Syndrome	9	12	21	17.94
II degree AV block	3	3	6	5.12
Bradycardia/junctional rhythm	5	6	11	9.4
AF	6	6	12	10.25
VT	4	2	6	5.12
PSVT	3	1	4	3.41
Total	67 (58%)	50(42%)	117	100%

Table 4. Others

DIAGNOSIS	Admissions			Mortality		
	Male	Female	Total (%)	Male	Female	Total (%)
Heart Failure	30	9	39 (26.53)	9	0	9 (23.07)
Hypertension	7	2	9 (6.12)	0	0	0
Chest Pain	25	19	44 (29.93)	0	0	0
Syncope	8	3	11 (7.48)	0	0	0
Cath. Procedures	20	6	26 (17.68)	0	0	0
Miscellaneous	14	4	18 (12.24)	1	1	2 (11.1)
Total	104	43	147 (100)	10	1	11(7.48)

Cigarette: A pinch of tobacco rolled in paper with fire at one end and a fool on the other.

Lecture: an art of transferring information from the notes of the lecturer to the notes of the students without passing through “the minds of either”

Conference: The confusion of one man multiplied by the number present.

Conference room: A place where everybody talks, nobody listens and every body disagrees later on.

Compromise: The art of dividing a cake in such a way that every body believes he got the biggest piece.

Tears: The hydraulic force by which masculine will power is defeated by feminine water power....