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IMPACT OF NUTITIONAL COUNSELLING (NC) ON CT-BASED BODY COMPOSITION IN PATIENTS WITH ONCOGENE ADDICTED ADVANCED NON-SMALL CELL LUNG (ANSCLC)

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Background and aims

During TKIs therapy for aNSCLC, impaired nutritional status reduces survival and correlates with severe drug-related toxicities. CT-scan is also emerging as a valuable tool for assessing body composition. NC is considered the first clinical intervention to prevent malnutrition in patients with lung cancer. We explored the impact of 1-year NC on radiological parameters in aNSCLC oncogene addicted pts treating with TKIs.

Methods

oncogene-addicted aNSCLC pts (EGFR, ALK, ROS1, BRAF) underwent to NC+TKIs (G1) vs TKIs alone (G2). CT-scan parameters included: Muscle Area (MA, cm2) at L3 level and Total Fat Adipose Tissue (TFAT, cm2; sum of subcutaneous, visceral and muscle adipose tissue). BMI was also calculated. Clinical and radiological data were collected at baseline (T0) and T3, T6, T12. ANOVA test was performed to test differences in G1 e G2.

Results

69 pts were analyzed, 39 pts in G1 and 30 in G2. Impact of 1-year NC on median values shown in Table 1.

Table 1		**T0**	**T3**	**T6**	**T12**	
Median FAT (cm^2)	G1	253.0	243.0	263.9	267.4	*P=0.02*
	G2	284.4	308.0	345.2	330.1	
BMI	G1	22.5	22.9	22.1	22.0	*P<0.001*
	G2	24.0	25.0	24.9	24.6	
Median MA (cm^2)	G1	100.7	102.6	103.8	102.2	*p=ns*
	G2	125.3	132.5	135.1	131.7	

Conclusions

in patients who received NC we observed a significant reduction of TFAT and BMI whereas these parameters were increased in control patients. NC could be explored as a valid tool to avoid the occurrence of impaired conditions such as sarcopenic obesity in this patient subset.