Characteristics	All patients: N=129	N1: N=87	CI-M1a: N=42		
Median age, years	65 (IQR: 58.5-70)	65 (IQR: 58-69)	68 (IQR: 42-81)		
Median PSA, ng/ml	47 (IQR: 21.25- 99.50)	47 (IQR: 20-100)	48 (IQR: 27.4-95.5)		
Gleason grade group					
1	3 (2.3%)	3 (3.4%)	0 (0%)		
2	14 (10.9%)	6 (6.9%)	8 (19%)		
3.	26 (20.2%)	18 (20.7%)	8 (19%)		
4	29 (22.5%)	23 (26.4%)	6 (14.3%)		
5	57 (44.2%)	37 (42.5%)	20 (47.6%)		
ADT					
Medical	95 (73,6%)	65 (74.7%)	30 (71.4%)		
Surgical: B/L	34 (26.4%)	22 (25.3%)	12 (28.6%)		
Orchiectomy		(30.00.07)	1-1-1-1-1		
Tumor stage					
T2	32 (24.8%)	26 (29.9%)	6 (14.3%)		
T3a	19 (14.7%)	13 (14.9%)	6 (14.3%)		
T3b	47 (36.4%)	29 (33.3%)	18 (42.9%)		
T4	31 (24%)	19 (21.8%)	12 (28.6%)		
Median NAHT duration	7months (IQR: 4-9)	7months (IQR:4-9)	7months (IQR: 6- 10)		
RT dose					
fractionation					
Extreme hypofractionation	76 (58.9%)	46 (52.9%)	30 (71.4%)		
Moderate	37 (28.7%)	30 (34.5%)	7 (16.7%)		
fractionation Conventional	16 (12.4%)	11 (12.6%)	5 (11.9%)		
fractionation	10 (12.4%)	11 (12.0%)	5(11.5%)		
RT target volumes			-		
Prostate only	11 (8.5%)	8 (9.2%)	3 (7.1%)		
Prostate + Pelvis	99 (76.7%)	70 (80.5%)	29 (69%)		
Prostate + pelvis + 19 (14.7%) odal boost		9 (10.3%)	10 (23.8%)		
Relapses (Total)	31	21	10		
Out of field Distant	20 (64.5%)	12 (57.1%)	8 (80%)		
relapse In field locoregional	9 (29%)	7 (33.3%)	2 (20%)		
relapse PSA only	2 (6.5%)	2 (9.5%)	0 (0%)		

Conclusion

The outcomes in CI-M1a and N1 are similar when treated with curative RT and ADT. Although categorized as metastatic, patients with CI-M1a should be offered curative treatment. These results need prospective validation

PD-0414 Trend over time of patient-reported QoL domains after pelvic nodal irradiation for prostate cancer

<u>A. Faiella</u>¹, A. Gebbia², E. Villa³, J.M. Waskiewicz⁴, A. Magli⁵, B. Avuzzi⁶, E. Garibaldi⁷, D. Cante⁸, G. Girelli⁹, M. Gatti¹⁰, L. Ferella¹¹, B. Noris Chiorda⁶, L. Rago¹², P. Ferrari¹³, A. Bresolin², C. Piva⁸, F. Badenchini⁶, T. Rancati¹⁴, R. Valdagni⁶, V. Vavassori³, F. Munoz¹¹, G. Sanguineti¹, N. Di Muzio¹⁵, C. Fiorino², C. Cozzarini¹⁵

¹Istituto Nazionale dei Tumori "Regina Elena", Radiotherapy, Rome, Italy; ²San Raffaele Scientific Institute, Medical Physics, Milan, Italy; ³Cliniche Gavazzeni-Humanitas, Radiotherapy, Bergamo, Italy; ⁴Comprensorio Sanitario di Bolzano, Radiotherapy, Bolzano, Italy; ⁵Azienda Ospedaliero Universitaria S. Maria della Misericordia, Radiotherapy, Udine, Italy; ⁶Fondazione IRCCS Istituto Nazionale dei Tumori, Radiotherapy, Milan, Italy; ¬A.O. SS. Antonio e Biagio, Radiotherapy, Alessandria, Italy; ⁶Sopedale di Ivrea, Radiotherapy, Ivrea, Italy; ⁰Ospedale degli Infermi, Radiotherapy, Biella, Italy; ¹ºIstituto di Candiolo - Fondazione del Piemonte per l'Oncologia IRCCS, Radiotherapy, Candiolo, Italy; ¹¹Ospedale Regionale Parini-AUSL Valle d'Aosta, Radiotherapy, Aosta, Italy; ¹²Comprensorio Sanitario di Bolzano, Medical Physics, Bolzano, Italy; ¹⁴Fondazione IRCCS Istituto Nazionale dei Tumori, Medical Physics, Milan, Italy; ¹⁵San Raffaele Scientific Institute, Radiotherapy, Milan, Italy

Purpose or Objective

To prospectively assess the 2-year evolution of the 4 domains (Bowel, Systemic, Emotional and Social) assessed by the IBDQ (Inflammatory Bowel Disease Questionnaire) in a large cohort of patients treated for prostate cancer with RT including

pelvic nodal irradiation (PNI) and with various intents (radical, adjuvant and salvage), with the ultimate aim of identifying intestinal symptoms most likely to deteriorate patient QoL.

Materials and Methods

A registered, prospective, multi-institutional study was activated in 2011 and is currently evaluating clinico-dosimetric predictors of RT-induced intestinal toxicity as measured by means of the Inflammatory Bowel Disease Questionnaire (IBDQ), evaluating 10 Bowel items and their possible detrimental impact on Emotional, Social and Systemic Domains. In the IBDQ scales (range 1-7), lower scores indicate worse situation.

This analysis focuses on 348 pts, with complete Bowel scales at baseline, RT mid-point and end, and 6, 12, 18 and 24 months after RT end. Patients with ≥2 missing answers in a domain were excluded, as were those with intestinal baseline scores <5. The average Domain scores were calculated at different time points and the statistical significance of the differences with the baseline values were tested through the Mann-Whitney test. The association between the bowel scores and the 4 domains was then quantified by the Spearman's rank correlation coefficient (rho), aiming to identify the bowel scores more strongly influencing the different domains.

Results

Analysis of average scores over time (*Figure 1*) showed a significant worsening of all Domains at RT end ($p<8x10^{-9}$), in particular for the Bowel and Social (mean difference with the baseline -0.67 and -0.61, respectively). The Emotional Domain recovered completely within 2 years from RT end (p=0.50), while the others did not fully recover relative to baseline in the same time span ($p<3x10^{-4}$).

The rho coefficients (Table 1) showed a strong correlation between all 10 Bowel symptoms and the Bowel Domain overall, highlighting the importance of Fecal Urgency (IBDQ 24, rho=0.74) for the acute Bowel Domain deterioration, and of Gas Passage (IBDQ 17, rho=0.72) for its late worsening. With respect to the Systemic, Emotional and Social Domains, Fecal Urgency showed the highest rho values, while Rectal Bleeding (IBDQ 22) and Nausea and Feeling Sick (IBDQ 29) exhibited only a weak, if any, correlation.

Conclusion

In patients receiving pelvic nodal irradiation as part of their radiation treatment for prostate cancer, all of the 4 IBDQ Domains exhibited RT-induced worsening, with full recovery within 2 years only for the Emotional Domain. Intestinal symptoms not only affected the Bowel Domain overall, but also exerted a non-negligible detrimental effect on the three remaining Domains evaluated by the IBDQ. The major weight of IBDQ 24 suggests that future studies focus on the identification of predictors of RT-related worsening of Fecal Urgency in order to mitigate it to the utmost.

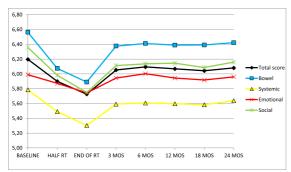


Figure 1

BOWEL	IBDQ 1	IBDQ 5	IBDQ 9	IBDQ 13	IBDQ 17	IBDQ 20	IBDQ 22	IBDQ 24	IBDQ 26	IBDQ 29
BASELINE	0,33	0,49	0,42	0,46	0,57	0,56	0,17	0,47	0,39	0,20
ACUTE	0,69	0,67	0,56	0,62	0,66	0,59	0,31	0,74	0,54	0,37
LATE	0,61	0,55	0,58	0,63	0,72	0,64	0,37	0,58	0,60	0,31
SYSTEMIC	IBDQ 1	IBDQ 5	IBDQ 9	IBDQ 13	IBDQ 17	IBDQ 20	IBDQ 22	IBDQ 24	IBDQ 26	IBDQ 29
BASELINE	0,10	0,24	0,20	0,24	0,29	0,32	0,10	0,30	0,31	0,12
ACUTE	0,42	0,39	0,37	0,47	0,43	0,38	0,21	0,50	0,41	0,32
LATE	0,38	0,32	0,38	0,41	0,47	0,41	0,23	0,48	0,41	0,26
EMOTIONAL	IBDQ 1	IBDQ 5	IBDQ 9	IBDQ 13	IBDQ 17	IBDQ 20	IBDQ 22	IBDQ 24	IBDQ 26	IBDQ 29
BASELINE	0,06	0,26	0,30	0,29	0,23	0,29	0,06	0,34	0,39	0,18
ACUTE	0,35	0,37	0,38	0,45	0,43	0,33	0,22	0,53	0,48	0,30
LATE	0,30	0,37	0,41	0,44	0,45	0,37	0,26	0,53	0,47	0,31
SOCIAL	IBDQ 1	IBDQ 5	IBDQ 9	IBDQ 13	IBDQ 17	IBDQ 20	IBDQ 22	IBDQ 24	IBDQ 26	IBDQ 29
BASELINE	0,09	0,17	0,25	0,23	0,15	0,07	0,04	0,20	0,30	0,06
ACUTE	0,41	0,38	0,22	0,31	0,35	0,23	0,18	0,52	0,42	0,17
LATE	0,32	0,38	0,36	0,37	0,25	0,29	0,22	0,46	0,48	0,29

Table 1

PD-0415 Pelvic RT in prostate cancer: late intestinal toxicity is modulated by severity of acute symptoms