

Transarterial Chemo-Embolization (TACE) and Radio-Embolization (TARE) in the combined modality treatment of advanced biliary tract cancer (aBTC): evaluation of feasibility and activity.

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OBJECTIVES

Advanced biliary tract cancer (aBTC) is a disease that scarcely benefits of systemic therapies but it often remains limited to liver, suggesting that locoregional strategies might be applied to increase treatment options and improve outcome (1-2). The aim of our analysis is to map locoregional treatments (TACE/TARE) use in 9 Italian Institutions and explore their safety and efficacy in advanced biliary tract cancer.

METHODS

We retrospectively collected data on patients (tab.1) with histologically-proven unresectable aBTC treated with TACE/TARE at our Institutions from August 2011 to December 2014. TACE was performed with infusion of 2mL of microspheres loaded with chemotherapy drugs into the tumor-supplying vessel. TARE is an innovative locoregional treatment which involves the delivery of SIR-Spheres® (SIRT) that contain the β-emitter yttrium-90 into the arterial supply of the liver. Data on pts, treatments and tumor characteristics were collected and analyzed to investigate feasibility and activity on these locoregional therapies.

RESULTS

- Forty-nine pts underwent a total of 82 TACE (median 2, range 1-7) and 13 TARE (median 1, range 1-2).
- TACE used doxorubin (n=31), oxaliplatin (n=5), CPT-11 (n=1) as active drugs while TARE employed SIRT technology (n=12).
- Twelve pts received TACE before starting any chemotherapy, 2 of them as neoadjuvant treatment to improve resectability and 8 as first line treatment; additional 17 pts received TACE/TARE as first line for the relapse after adjuvant gemcitabine-based chemotherapy (8 pts) or as consolidation strategy after a partial response or a stabilization to systemic chemotherapy for their disease (9 pts). Twenty-two pts received TARE/TACE in second or later lines.
- Three complete response (6%), eleven partial response (22%) and twenty-eight stable disease (57%) were reported while seven patients had a progression-liver disease (15%) Fig 1. Two patients became resectable and underwent liver resection after locoregional treatment.
- Grade 1-2 toxic effects occurred in 18% of pts and included abdominal pain, fever and fatigue; only two pts had an hepatic abscess as major complication (tab.2).
- At a median follow-up from TACE/TARE of 10 months, 27 out of 49 pts are alive.

Patient characteristics (N=49)	
Age - yr	
Median	64
Range	32-78
Sex -n° (%)	
Male	25 (51)
Female	24 (49)
Performance status (ECOG)-n° (%)	
0	28 (57)
1	20 (41)
2	1 (2)
Hepatic tumor location-n° (%)	
Intrahepatic cholangiocarcinoma	42 (86%)
Extrahepatic cholangiocarcinoma	5 (10%)
Gallbladder cancer	2 (4%)
Extra hepatic disease -n° (%)	
No	28 (57)
Yes (lung, lymph nodes, bone)	21 (43%)

Tab.1: Patients characteristics

TOXIC EFFECTS	PATIENTS (9/49 tot) n°
Abdominal pain	4
Fever	3
Fatigue	2
SURGERY COMPLICATION	
Hepatic abscess	2

Tab.2: Adverse events

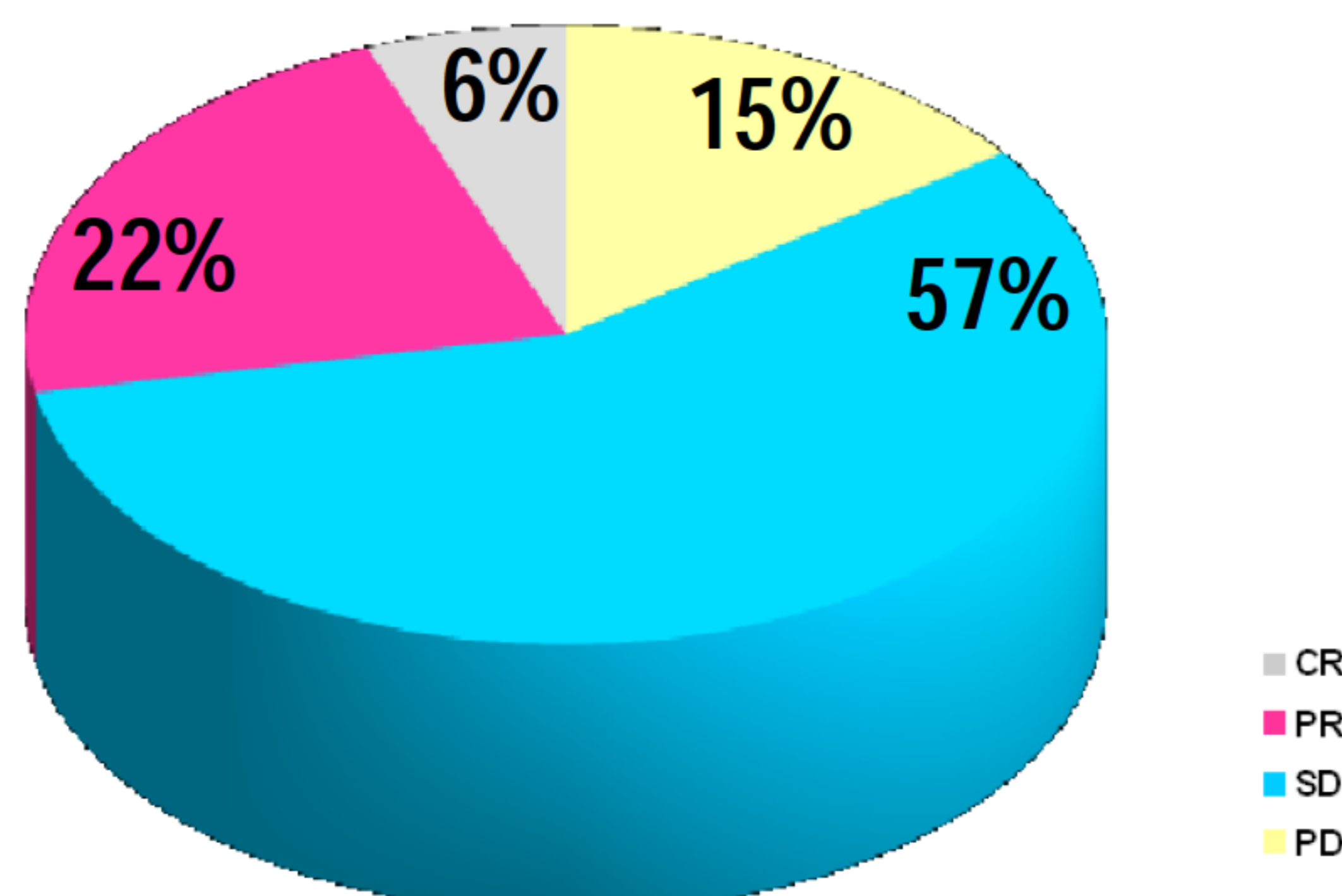


Fig.1: CR (complete response);SD (stable disease); RP (partial response); PD (progression disease)

CONCLUSIONS

TACE and TARE seem to be safe and well-tolerated therapies in aBTC, however their employment is widely inhomogeneous across treatment lines. These promising modality approaches and the better timing for their use need to be confirmed in larger and controlled studies.

References

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