Four decades of advances in general surgery in a community hospital of Spain

Aniceto Baltasar*, Carlos Serra, Marcelo Bengochea, Carlos Escrivá, Emilio Marcote, Rafael Bou, Javier Miró, Francisco Arlandis, Lirios Ferri, Luis Cipagauta, Nieves Pérez, Mario Alonso and Rosa Martínez
Alcoy Hospital, Alcoy. España, Spain

Abstract
Changes in the practice of surgery over the last 40 years have been extraordinary. We want to reflect the progress during this period in the Community Hospital of Alcoy, Spain. Technology and staff training have improved in an extraordinary way allowing that medical assistance in the community hospitals is quite similar to that offered at the most sophisticated centers.

Introduction
The changes in medicine with the creation in 1967 of the National Health System (NHS) in Spain and the Intern and Residents training (IRT) system have been extraordinary. The NHS network of hospitals covers medium-sized cities with Community Hospitals (CH) of less than 300 beds and 250,000 inhabitant’s coverage.

Aim
Reflect the changes and advances in general surgery at a CH during a 40 years period.

Geographical and historical context
Alcoy with 60,000 inhabitants, and its health department with 140,000 persons in South-eastern Spain was first served by a magnificent Oliver Civil Hospital donated by a patron in 1868-77, but then faded with time and reflects what happened in other Spanish regions. The city, isolated, is located in mountainous area of the Valencia Region 60 km far from Alicante and 100 km from Valencia.

Alcoy CH was the first Community hospital of the Valencia Region and it was inaugurated in 1972 but the Head of Surgical Service was not appointed until 1974. The training of first IRT residents started in Spain in 1967 and graduated five years later, but many were not attracted to work in a supposedly “distant hospital” far from large centers and big cities, where the endowments were initially precarious. But by 1978 in Alcoy there were five IRT surgeons, and the coverage of other services took four more years to provide minimal services.

The dark years 1974-78
Aniceto Baltasar MD (AB) was appointed in 1974 as Head of Service and started working alone with only one assistant (J. Tomas MD) until 1978. Later on, 7 non specialist fellows (Del Rio, Bou, Fernández, Arcil, Pérez, Carbonell and Llopis) gave us an invaluable support. We opened an Intensive Care Unit (ICU) in 1976 with 3 beds, two pressure and three volumetric ventilators, monitors, PVC, hypothermia blankets, anti-scar mattresses, gas analyzer, cardio conversion and pacemakers. Twelve young nurses were trained with daily classes and the translation of two books on Ventilator and Cardiac Care [1,2]

We abandoned the traditional cut-down venotomies in favor of the subclavian punctures and initiated the use of complex procedures (aortic grafts, femoro-popliteal bypasses, Swiss AEO osteo-synthesis, 52 transverse and Seldinger angiographies (52), bronchoscopies (45), intra-cavitary and epicardial pacemakers (46), lung lobectomies, Comando mandible resection, fibro-gastroscopy (28), mid-ternal thoracotomy for mediastinal tumor, porto-cava shunts, Nyhus pre-peritoneal hernia and pancreatectomies.

The Alcoy’s Analysis and Blood Bank Services (a magnificent volunteer institution) were excellent, with all necessary blood transfusions but w derivatives at the time.

Years 78-90. Open surgery
Then in 1978 the four first IRT well trained surgeons (Bengochea, Del Río, Marcote, Escrivá) and by 1987 two more, Bou and Miró, joint us members of the staff. Later on Arlandis and Alonso arrived in 1990, and Serra (current Chief of the Service), Martínez and Cipagauta in 1992 (Figure 1), and by then the surgical team with 11 members was

Correspondence to: Aniceto Baltasar, Alcoy Hospital, Alcoy. España, Spain, Tel: + 34-616.321.021; E-mail: baltasarani@gmail.com

Key words: advances in surgery, general surgery, community hospital

Received: March 13, 2017; Accepted: April 14, 2017; Published: April 17, 2017
By 1985 other services staffs (Anesthesia, Radiology, Digestive-endoscopies, ICU, Pathology) were filled. In 40 years the Surgical Service have been very fortunate to have a stable staff since only three members left the service to occupy relevant positions in other hospitals and by 1998 obtained the IRT teaching position of one resident per year, and has become an organ donor center, has MRI and an oncology service with radiotherapy.

Colostomy irrigation

In 1983 we founded Alcoy Ostomy Club (AOC) and Spanish Ostomy Club (SOC) and organized three meetings in Alcoy. We started colostomy irrigations in Spain [3], a very uncommon therapy and published two videos [4], and a paper with permission from the Mayo Clinic of MN [5]. In this volunteer program a patient with a colostomy visits patients in the pre and postoperative period and shows them what a colostomy is. He teaches the patient and his family the technique of colostomy lavage before discharge and the use of a plugging device that allows him to live "without using a colostomy bag", as a normal person without any psychological traumas, to participate in social events and even to bathe in public swimming pools. All the patients have performed their irrigation every two days for years. Ms. Encarna Nadal has been teaching and caring for all patients with ostomies for 30 years and participated in two National TV programs to publicize the irrigation and received recognition awards by the Alcoy CH in November 1995 and the Rotary Club Alcoy in 2016 for his disinterested dedication.

Vascular surgery

In the years 1970-80 there were no Vascular Surgery Units in the country but this surgery was performed in many hospitals. We started in the country the 1st use of Inahara [6] technique of eversion retrograde thrombo-endarterectomy (ERTE) that had better results than the vascular grafts. We introduced the technique in National Surgical and Vascular Surgery Congresses. An ERTE video [7] received the Motril Aesculapius Award in 1984, the most important in Spain at that time. We started the use of "Sparks grafts", an ingenious attempt to "create vessels" [8], but without long-term success, since progressive fibrosis of the grafts finally obstructed the vessels.

Major infra-abdominal aorta major surgery, mesenteric vessels, iliac, femoro-popliteal bypass, carotid aneurysms were carried out. Unilateral ERTE from aortic bifurcation to the femoral bifurcation were the most frequent under regional anesthesis.

The Valencia Vascular Surgery Society 1st Meeting was held in Alcoy in October 1988, attended by Juan Matesanz, a distinguished Boston-trained surgeon and 1st chief of the Madrid Clinic University Hospital (Figure 2).

We reported on aortic aneurysms [9], internal carotid aneurysm [10, 11], combined aortoiliac and double bowel revascularization [12], venous aneurysm [13] and anastomotic aneurysm [14]. The Vascular Services in the Valencia community started working and in 1998 and then we abandoned this surgery.

Vascular and oncologic surgery

Nine cases of radical oncology and vascular resection were done. The 1st in 1985 was a sarcoma in the middle third of the right thigh including the femoral vessels. A radical resection of the tumor and vascular reconstruction (arterial with Dacron, femoral veins with two inverted saphenous vein grafts, and the formation of arterial-venous fistula at the ankle to prevent thrombosis of the veins) was done and this patient currently lives [15].

In 1982, a patient had a recurrent retro-peritoneal metastatic disgerminoma involving the infra-renal aorta wall. She had a radical left nephrectomy and infra-renal aortic resection. An Dacron aortic graft was used to reconstruct the aorta, and is currently living [16]. Until then, only one case of aortic resection and vena cava had been published by Crawford and De Bakey [17], 7 cases of 297 sarcomas by Fortner, et al. [18] from the NYC Memorial and 13 cases by Imparato et al. [19] at Roswell Park in Buffalo, NY, both recognized global centers dedicated to cancer.

We then performed four infra-renal aortic resections for retroperitoneal sarcomas [20] and presented a video at the ACS American Congress in Chicago at the Symposium "Spectacular Problems in Surgery" [21] an unusual technique at that time. And the ACS requested to present it again eight years later and it was done by Dr. Serra in San Francisco and is in ACS Video Library.

One of those resected sarcomas recurred at the left iliac vein 2 years later and the left iliac-femoral (left artery and vein) were resected [22], and had a cross-femoral revascularization with two saphenous (for artery and vein) were done. He suffered massive hemorrhage from pelvic veins and was treated with abdominal packing. He remained intubated at the ICU and was re-operated three days later, the pelvis was clean and the abdomen was closed, and both cross-femoral grafts remained permeable.

Thoracic surgery

From the beginning, we performed thoracic surgeries such as bronchoscopies (from 40 to 68 per year), tracheotomies (8-12), thoracoscopy, pneumo-thorax (12-15), lobectomies and pneumonectomies for cancer (7-11), esophagus (9) and endocavitary pacemakers. We introduced thoracoscopy in 1993 and performed bilateral sympathectomies for hyperhidrosis, emphysematous bullae [23], neurilmenoma [24] and the 1st pericardial window due to effusion in the country [25]. In 2003 all thoracic surgery was transferred to the newly created regional referral center.

Neck

We did treated thyroid and parathyroid tumors, radical neck dissections [26], parotid tumors [27], two rare cases of suffocating retro-pharyngeal cervical lipomas [28,29] and radical surgery for cervical esophagus cancer with gastroplasty [30].

Four esophageal lesions [31] due to autolysis with Salfumant were operated with immediate resection of the esophagus and stomach and then colonic transposition. Subsequently, two of them developed late
Baltasar A (2017) Four decades of advances in general surgery in a community hospital of Spain

Breast surgery

The Services of Surgery and Radiology began in 1994 the 1st center for detection and screening of breast cancer in the Valencia community. We treated phyllodes tumors [32], breast carcinomas [33] and mammmary reconstructions with immediate prostheses [35,36].

Marcote [37] published DNA ploidy and S-phase of the cell cycle and active proliferation in 104 patients, flow urodmetry in 220 patients [38,39] and was Ph.D. "Cum Laude" award in 1990. Serra et al. [40-45] also published in 1990 extensive studies of male breast cancer with determination of the Pepsinogen C and Apolipoprotein D. He received a Ph.D. "Cum Laude" award.

Digestive surgery in the 80’s

The 1st two cases of Kock’s continent ileostomy were done in 1985 after total colectomy for diffuse colonic cancer [46,47]. A Kock double valve urinary continent ileostomy [48] was done in a patient with single kidney and recurrent bladder cancer. We published several surgical corrections of post-traumatic diaphragmatic hernias [49-54].

In the 1980s, gastro-duodenal ulcers were a very prevalent condition and we used the VARY (vagotomy-antrectomy and Y-de-Roux reconstruction) [55,56], in 67 patients with very good results between 1978-85. Two patients suffered mesenteric necrosis, one 11 years later due to mesenteric rotation and another 4 years later [57].

Martinez et al. [58,59] in 1994 obtains her Ph.D. "Cum Laude" for studies on gastric emptying after gastritis of reflux, VARY and duodenal

Laparoscopic surgery: 1992

Starting in 1992 laparoscopy has been the biggest surgery revolution in these forty years. We were spectator in the 1st laparoscopic gallbladder at the Ruber International Sanatorium in Madrid in 1990. We started our 1st gallbladder by lap in 1991, oophorectomy

Retained foreign bodies in the abdomen are an unpleasant complication and we used compresses with rings [70,71] as very effective to avoid them and no patient suffered this complication in 40 years (Figure 4).

Continuous sutures were done in abdominal closures and in digestive anastomosis [72,73], and Serra et al. [74] used the 1st Spanish self-expanding prostheses in colonic obstructions. Pardo et al. [75] publishes in 1996 (Figure 5) the "Index of authors who publish the most" in Spanish Surgery. And Alcoy-CH ranks 1st among CH and 7th since 1973-93 among all the country hospitals and the 1st of all in June 1996.

Laparoscopic surgery: 1992

Starting in 1992 laparoscopy has been the biggest surgery revolution in these forty years. We were spectator in the 1st laparoscopic gallbladder at the Ruber International Sanatorium in Madrid in 1990. We started our 1st gallbladder by lap in 1991, oophorectomy

Retained foreign bodies in the abdomen are an unpleasant complication and we used compresses with rings [70,71] as very effective to avoid them and no patient suffered this complication in 40 years (Figure 4).

Continuous sutures were done in abdominal closures and in digestive anastomosis [72,73], and Serra et al. [74] used the 1st Spanish self-expanding prostheses in colonic obstructions. Pardo et al. [75] publishes in 1996 (Figure 5) the "Index of authors who publish the most" in Spanish Surgery. And Alcoy-CH ranks 1st among CH and 7th since 1973-93 among all the country hospitals and the 1st of all in June 1996.

Digestive surgery in the 80’s

The 1st two cases of Kock’s continent ileostomy were done in 1985 after total colectomy for diffuse colonic cancer [46,47]. A Kock double valve urinary continent ileostomy [48] was done in a patient with single kidney and recurrent bladder cancer. We published several surgical corrections of post-traumatic diaphragmatic hernias [49-54].

In the 1980s, gastro-duodenal ulcers were a very prevalent condition and we used the VARY (vagotomy-antrectomy and Y-de-Roux reconstruction) [55,56], in 67 patients with very good results between 1978-85. Two patients suffered mesenteric necrosis, one 11 years later due to mesenteric rotation and another 4 years later [57].

Martinez et al. [58,59] in 1994 obtains her Ph.D. "Cum Laude" for studies on gastric emptying after gastritis of reflux, VARY and duodenal

Laparoscopic surgery: 1992

Starting in 1992 laparoscopy has been the biggest surgery revolution in these forty years. We were spectator in the 1st laparoscopic gallbladder at the Ruber International Sanatorium in Madrid in 1990. We started our 1st gallbladder by lap in 1991, oophorectomy
in 1992, resection of lung bullae in 1992, mediastinal tumor in 1992, pulmonary tuberculosis in 1994, splenic rupture in 1994. Pericardial window in 1994. Nissen-1996. Splenectomy-1996. Inguinal hernia -1997. Left colectomy-1997. TAPP-1997. TEP-1998. Colectomy-1998. Adrenalec-tomy-1998. Heller-1998. Abdominoperineal-1999. Thoracic sympathectomy-2000. Use of intra-abdominal meshes after a visit to Dr Carbajo-2000. Currently the service perform standard intra-abdominal laparoscopy and the “laparoscopic” group does colon, adrenal, spleen, abdominoperineal resections, noninvasive endo-anal resection (TAMIS), TAMIS-TME, and distal pancreatectomies.

Bariatric surgery (BS)

Alcoy-CH is recognized as a pioneer bariatric center [76]. We funded SECO (Spanish Society for Obesity Surgery) in 1997, the BMI-Latin magazine (www.bmilatina.com) in 2011 and had the IFSO Presidency and World Congress in 2003. We performed in 1977 the 1st RNY gastric bypass in Spain [77], 1st metabolic surgery for hypercholesterolemia [78], 1st VGB separation of the vertical line [79,80], 1st open DS in 1995 [81], 1st lap RNY in Europe 1977 [82,83] and 1st world report of internal hernias after RNY-GB [84], 1st lap LDS [85] in 2001. The paper on Sleeve Gastrectomy was one of the 1st in Europe [86] has the 61st higher bariatric citation index in the world [87]. Non-removable Wall-stents for leaks [88,89] were used before the removable ones were developed, 1st RNY diversion for SG leaks [90], 1st diabetes surgery 2004 [91], 1st and adolescent bariatric surgery (ABS) 2008 [92] and developed the concept of Expected BMI after BS [93], cofounded the European Centers of Excellence in 2013.

Associations and congresses

Founders Video-Revista de Cirugía (VRC) with Dr Ballesta-1987 in four languages (French, Italian Spanish and Portuguese) www. bmilatina.com

Founder of the European Association of Video Surgery, 1988

Organized the 1 National Congress of Video Surgery. Alcoy-Alicante 1989.

For 20 years (1987-2007) organized the Alicante Meetings of Surgery, every year in Alcoy

1984-2004 Detailed Memories (Annual Reports) of the Service. Posters. 46. Two first prizes Milan 1994 and Valencia SECO 2010 Videos: The HC-Alcoy has 25 videos published.

101 in Spanish-. 3 first Prizes and 12 winners in Videomed and Video-Surgery Valen-cia

44 in English-. 2 First prizes and 3 more prizes

http ://www.youtube.com/ channel / UCepwVhQeOhuxKoHqNq71zg

273 articles published in surgery and 109 in bariatric.

We have the Maximum number of citations in the province of Alicante by Research Gate: Publication downloads 10,878. Views 8,631, 1.99 per publication, 1,154 citations.

References

1. Bean S, Brown N, Chey A (1977) Physiologic bases for respiratory care. Mountain Press Publishing Co. Missoula, MT.

2. Hamilton A (1978) Selected subjects for critical care nurses. Mountain Press Publishing Co. Missoula, MT.

3. Baltasar A, Del Rio J, Herrera GR (1984) Irrigación de las colostomías. Boletín de la AEC (Asociación española de ostomizados) 1: 1-3.

4. Baltasar A, Del Rio J, Herrera GR (1984) Colostomy washouts. FRC 1: 10-11.

5. Baltasar A, Jao S, Beart R (1985) Cuidados de irrigación en las colostomías sigmoideas. Arch Surg 120: 916-917.

6. Inahara T (1972) Endarterectomy for occlusive disease of the aortoiliac and common femoral arteries. Evaluation of results of the operation. FRC 124: 235-243. [Crossref]

7. Baltasar A, Herrera GR (1987) Trombo-endarterectomía retrógrada aorto-femoral bilateral. FRC 4: 1-4.

8. Noël R, Thévenet HP, King A, Guidoin M (1984) The Sparks-Mandril arterial prosthesis. An ingenious concept, a total failure. What can we learn from it? J Des Maladies Vasculaires 9: 277-283.

9. Blanquer JJ, Rapa M, Adam A, Ortolá P, Aracil C, et al. (1992) [Aneurysm of the abdominal aorta]. Aten Primaria 10: 916-919. [Crossref]

10. Marceote E, Arlandis F, Baltasar A (1993) Aneurisma de carótica interna. Cir Esp 5: 455-457.

11. Baltasar A, Marcote E, Arlandis (1994) Aneurisma de carótida interna. Video. VCR 11: 15-24.

12. Marceote E, Baltasar A, Arlandis F (1991) Revascularización combinada aortoiliaca e intestinal doble. CTF 9: 543-548.

13. Marceote E, Arlandis F, Baltasar A (1994) Aneurisma venoso primario de safena. Cir Esp 55: 440-441.

14. Marceote E, Arlandis F, Martínez R (1994) Aneurisma anastomótico de arteria femoral. Cir Andaluza 5: 52-56.

15. Baltasar A, Escrivá C, Marcote E (1980) Un caso de cirugía vascular reconstructiva para salvar la extremidad inferior por sarcoma. Rev Esp Cir 7: 326-330.

16. Baltasar A, Marceote E, Barnés JJ, Bengoechea M (1985) Reseción de aorta abdominal por disgerminoma-retroperitoneal metastásico. CTF 5: 224-228.

17. Crawford ES, De Bakey M (1956) Wide excision including involved aorta and vena cava and replacement with artic homograft for retroperitoneal malignant tumors. Cancer 9: 1085.

18. Fortner JG, Kim DK, Shiu MH (1977) Limb-preserving vascular surgery for malignant tumors of the lower extremity. Arch Surg 112: 391-394. [Crossref]

19. Imparato AM, Rosse DF, Francis KC, Lewis MM (1978) Major vascular reconstruction for limb salvage in patients with soft tissue and skeletal sarcomas of the extremities. Surg Gynecol Obstet 147: 891-896. [Crossref]

20. Baltasar A, Arlandis F, Bou R (1995) Reconstrucción vascular en la cirugía oncológica radical. Cir Esp 58: 345-349.

21. Martínez R, Arlandis F, Baltasar A (1999) Reconstrucción vascular en retroperitoneal sarcomas I. FRC 16: 15-17.

22. Martínez R, Arlandis F, Baltasar A (1999) Reconstrucción vascular en retroperitoneal sarcomas II. FRC 16: 31-34.

23. Baltasar A, Escrivá C, Bou R (1993) Reseción de bullas enfisematosas por toracoscopia. VCR 10: 16-19.

24. Baltasar A, Miró J, Bou R (1994) Reseción por toracoscopia de Neurilema sarcomas II. VRC 16: 31-34.

25. Baltasar A, Arlandis F, Serra C (1997) Total parotidectomy preserving the facial nerve (“Conservative parotidectomy”). VCR 11: 35-39.

26. Arlandis F, Baltasar A, Del Rio (1995) Creación de ventana pericardio-pleural por vdeo toracoscopia. VCR 12: 43-46.

27. Arlandis F, Serra C, Baltasar A (1997) Bilateral functional dissection of the neck. VCR 13: 6-11.

28. Martínez R, Baltasar A, Serra C (1997) Total parotidectomy preserving the facial nerve “Conservative parotidectomy.” VCR 11: 35-39.

29. Serra C, Baltasar A, Arlandis F (1997) Lipomas retrofaringeos sofoantes. Cir Esp 62: 516-518.

30. Serra C, Baltasar A, Bou R (1999) Radical surgery in cervical esophageal cancer. Cirugía radical en cancer de esófago cervical. VRC 14: 31-33.
Baltasar A (2017) Four decades of advances in general surgery in a community hospital of Spain

31. Serra C, Arlandis F, Martínez R, Baltasar A (1996) Lesiones faringeo-esofágicas por ingesta de Sulfamant. Cir Esp 59: 77-80.
32. Marcote E, Arlandis F, Baltasar A (1993) Tumores yllhodes de mama. Circ Andaluza 10: 42-48.
33. Farran Teixidor L, Vitala Vílals JM, Miró Martín M, Higueras Salet C, Béttonic Larraga C, et al. (2011) Supercharged ileocoloplasty: an option for complex oesophageal reconstructions. Cir Esp 89: 87-93. [Crossref]
34. Dewever M, Gomez T, Madrazo Z, López A, Farrán L, et al. (2014) Failed colonic interposition after esophageo-gastrectomy. What’s the next step? Cir Esp 10: 1. [Crossref]
35. Martínez R, Baltasar A, Manzano (1996) Carcinomas de mama. Cir Esp 60: 515-517.
36. Serra C, Arlandis F, Del Río J, Baltasar A (1999) Reconstrucción inmediata con prótesis tras mastectomía en la enfermedad benigna y maligna de la mama. Cir Esp 65: 130-134.
37. Marcote E, Campos A, Baltasar A (1993) Significación pronóstica de la ploidía del ADN y de fase S en el cáncer de mama. Cir Esp 53: 89-96.
38. Marcote E, Campos A, Baltasar A (1993) Ploidy, proliferative activity and other prognostic factors in breast cancer. Res in Surg 5: 121-126.
39. Marcote E, Campos A, Baurza (1993) The prognostic significance of DNA ploidy and S-phase in breast cancer. Res in Surg 5: 184-188.
40. Serra C, Martínez R, Cipagauta L (1995) Carcinoma de mama sincrónico bilateral en un paciente varón. Cir Esp 5: 368-369.
41. Serra C, Vizoso F, Medrano J (1998) Estudio multicéntrico de 70 pacientes varones diagnosticados de cáncer de mama. Cir Esp 64: 213-220.
42. Serra Díaz C, Vizoso F, Rodríguez JC, Merino AM, González LO, et al. (1999) Expression of pepsinogen C in gynecomastia. One form of effective detection. Análisis bibliométrico a través de la revista Cirugía española en el periodo 1974-1993. Cir Esp 60: 213-216.
43. Baltasar A, Del Río J, Baltasar A (1996) Duodenum-preserving cephalic pancreatectomy. VCR 63: 17-32.
44. Baltasar A, Tomás J, Miralles J (1983) [Pylorus preservation in pancreatoduodenectomy]. Análisis bibliométrico a través de la revista Cirugía española en el periodo 1974-1993. Cir Esp 60: 213-216.
45. Baltasar A, Marcote E, Bou R, Bengochea M, et al. (2005) Laparoscopic sleeve gastrectomy at more than 5 years. World J Surg 29: 429-439. [Crossref]
46. Baltasar A, Del Río J, Baltasar A, Herrera GB (1984) Hernia diafragmática incarcerada con deslizamiento. Cir Andaluza 9: 341-345.
47. Baltasar A (1992) Duodenum-preserving cephalic pancreatectomy. Varco. Saunders. Philadelphia Pp. 241-256.
48. Baltasar A, Tomás J, Miralles J (1983) [Pylorus preservation in pancreatoduodenectomy]. Rev Esp Enferm Apar Dig 63: 707-712. [Crossref]
49. Baltasar A (1992) Duodenum-preserving cephalic pancreatectomy. VCR 60: 90-92.
50. Marcote E, Arlandis F, Baltasar A (1993) Cuerpo extraño textil olvidado en el abdomen. A propósito de dos casos. Cir Esp 50: 171-174.
51. Marcote E, Arlandis F, Baltasar A (1996) Duodenopancreatectomía cefálica con preservación del píloro. Pancréato-gastrostomía posterior. VCR 6: 29-34.
52. Baltasar A, Marcote E, Del Río J (1999) Preservación duodenal en la resección cefálica de páncreas por patología cística. Cir Esp 22: 225-232.
53. Baltasar A, Marcote E, Del Río J (1995) Sphinteroplasty (no sphinterotomy) versus latero-latero cholecodo-dudenostomía. Varco. Saunders. Philadelphia Pp. 241-256.
54. Baltasar A, Marcote E, Arlandis F (1999) Endoscopy in the diagnosis of postoperative gastriis caused by alkaline reflux. Rev Esp Enferm Dig 87: 564-568. [Crossref]
55. Baltasar A, Vidal V, Baltasar A (1995) Nuevo método de estudio del vaciado gástrico en pacientes gastrectomizados. REEAD 97: 769-773.
56. Martínez Castro R, Baltasar A, Vidal V, Sánchez Cuenca J, Lledó JL (1997) Gastric emptying in patients with morbid obesity treated with a duodenal switch. Rev Esp Enferm Dig 89: 413-414. [Crossref]
57. Baltasar A, Tomás J, Bengochea M (1986) Esfinteroplastia (no esfinterotomía) en patología biliar. Cir Esp 4: 874-880.
58. Baltasar A, Tomás J, Bengochea M (1986) Sphinteroplasty (no sphinterotomy) in biliary surgery. JRC 3: 26-28.
59. Jones A (2000) Sphinteroplasty (no sphinterotomy) versus latero-latero choledocho-duodenostomía. Varco. Saunders. Philadelphia Pp. 241-256.
60. Baltasar A, Sánchez Cuenca J, et al. (1995) [Value of endoscopy in the diagnosis of postoperative gastriis caused by alkaline reflux]. Rev Esp Enferm Dig 87: 564-568. [Crossref]
61. Baltasar A, Serra C, Pérez N, Bou R, Bengochea M, et al. (2005) Laparoscopic sleeve gastrectomy at more than 5 years. World J Surg 29: 429-439. [Crossref]
62. Baltasar A, Bou R, Arlandis F, Martínez R, Serrano M et al. (1998) Gastric bypass in morbid obesity. Rev Clin Endocrinol Metab 157: 395-399. [Crossref]
63. Baltasar A, Marcote E, Bou R (1991) Exclusión ileal parcial en la hipercolesterinemia. Cir Esp 47: 495-478. [Crossref]
64. Baltasar A, Bou R, Arlandis F, Martínez R, Serrano M et al. (1998) Gastric bypass in morbid obesity. Rev Clin Endocrinol Metab 157: 395-399. [Crossref]
65. Baltasar A, Marcote E, Bou R (1991) Exclusión ileal parcial en la hipercolesterinemia. Cir Esp 47: 495-478. [Crossref]
66. Baltasar A (1989) Modified vertical banded gastroplasty. Technique with vertical division and serosal patch. Acta Chir Scand 155: 107-112. [Crossref]
67. Baltasar A, Bou R, Arlandis F, Martínez R, Serrano M et al. (1998) Vertical banded gastroplasty at more than 5 years. Obes Surg 8: 29-34. [Crossref]
68. Baltasar A, Bou R, Marcote E (1995) Hybrid bariatric surgery: Bilipancreatic diversion and duodenal switch. Rev Esp Enferm 65: 419-423. [Crossref]
69. Baltasar A, Bou R, Bengochea M, Miró J, Arlandis F: Lap Roux-Y gastric bypass. Obes Surg. 1998;8:393.
70. Baltasar A, Bou R, Miró J (2000) Laparoscopic gastric bypass. Bypass gástrico laparoscópico. Rev Esp Enferm Ap Dig 10: 661-664. [Crossref]
71. Serra C, Baltasar A, Bou R, Miró J, Cipagauta LA (1999) Internal hernias and gastric perforation after a laparoscopic gastric bypass. Obes Surg 9: 546-549. [Crossref]
72. Baltasar A, Bou R, Miró J, Bengochea M, Serrano M et al. (2002) Laparoscopic bilipancreatic diversion with duodenal switch: technique and initial experience. Obes Surg 12: 245-248. [Crossref]
73. Baltasar A, Serra C, Pérez N, Bou R, Bengochea M, et al. (2005) Laparoscopic sleeve gastrectomy out.
gastrectomy: a multi-purpose bariatric operation. *Obes Surg* 15: 1124-1128. [Crossref]

87. Ahmad SS, Ahmad SS, Kohl S, Ahmad S, Ahmed AR (2015) The hundred most cited articles in bariatric surgery. *Obes Surg* 25: 900-909. [Crossref]

88. Baltasar A, Pérez N, Bou R, Miro J, Bengochea M, et al. (2000) Wall-stent prosthesis for severe leak and obstruction of the duodenal switch Gastric tube. *Obes Surg* 10: 309.

89. Serra C, Baltasar A, Andreo L, Pérez N, Bou R, et al. (2007) Treatment of gastric leaks with coated self-expanding stents after sleeve gastrectomy. *Obes Surg* 17: 866-872. [Crossref]

90. Baltasar A, Bou R, Bengochea M, Serra C, Cipagauta L (2007) Use of a Roux limb to correct esophagogastric junction fistulas after sleeve gastrectomy. *Obes Surg* 17: 1408-1410. [Crossref]

91. Baltasar A (2015) Historical note: First diabetes metabolic operation in Spain. *Integr Obesity Diabetes* 2: 180-182.

92. Baltasar A, Serra C, Bou R, Bengochea M, Andreo L (2008) Sleeve gastrectomy in a 10-year-old child. *Obes Surg* 18: 733-736. [Crossref]

93. Baltasar A, Perez N, Serra C, Bou R, Bengochea M, et al. (2011) Weight loss reporting: predicted body mass index after bariatric surgery. *Obes Surg* 21: 367-372. [Crossref]

Copyright: ©2017 Baltasar A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.