

Pelvic Floor Digest

This section presents a small sample of the Pelvic Floor Digest, an online publication (www.pelvicfloordigest.org) that reproduces titles and abstracts from over 200 journals. The goal is to increase interest in all the compartments of the pelvic floor and to develop an interdisciplinary culture in the reader.

1 – THE PELVIC FLOOR

Variations in stress incontinence and prolapse management by surgeon specialty. Anger JT, Litwin MS, Wang Q, et al. *J Urol.* 2007 Aug 14; *epub.* Numerous studies have documented a relationship between provider specialty and outcomes for surgical procedures. In this study the effect of surgeon specialty was determined on outcomes of sling surgery for women with stress urinary incontinence. Early prolapse management by gynecologists corresponded to fewer prolapse repairs in the year following the sling, suggesting that gynecologists are more likely to identify and manage prolapse at the time of the evaluation of urinary incontinence, a strategy that appears to avoid the morbidity and cost of repeat surgery.

Symptoms of anal incontinence and difficult defecation among women with prolapse and a matched control cohort. Morgan DM, Delancey JO, Guire KE, Finner DE. *Am J Obstet Gynecol.* 2007 Aug 20; *epub.* One-third of women with pelvic prolapse have anal incontinence of flatus on “most” or “every” day or difficult defecation with “most” or “every” bowel movement. This study quantifies the risk for these symptoms comparing women with and without prolapse of similar age, body mass index, race, and hysterectomy status. Length of the perineal body, mean parity, and a positive standing cough stress test are associated with greater symptom severity.

A prospective, randomized controlled trial of the use of an anal purse-string suture to decrease contamination during pelvic reconstructive surgery. Biller DH, Guerette NL, Bena JF, Davila GW. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007 Apr 11; *epub.* An anal purse-string suture is an effective way of reducing fecal contamination of the sterile field when performing vaginal pelvic reconstructive surgery. No wound infections, graft erosions, or healing abnormalities however were noted without the suture.

Medium-term efficacy of pelvic floor muscle training for female urinary incontinence in daily practice. Lamers BH, van der Vaart CH. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18:301. Pelvic floor muscle training for urinary incontinence is effective for their quality of life in half of the women. If not successful, women seem to benefit significantly from incontinence surgery. This is the result of a study on 355 women treated by specialized physiotherapists, with a mean follow-up of 32 months.

Deformation of the pelvic floor muscles during a vaginal delivery. Parente MP, Jorge RM, Mascarenhas T et al. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007 May 24; *epub.* Since pelvic floor injuries during a vaginal delivery can be considered a significant factor in the development of urinary and fecal incontinence and pelvic organ prolapse, to clarify the mechanisms behind pelvic floor disorders related to a vaginal delivery, a finite element method and a three-dimensional computer model of the pelvic floor and fetus were used. Results for the pelvic floor stretch values obtained during the passage of the fetus head show that the maximum deformation obtained is 0.66 for a vertical displacement of the fetal head of approximately 60 mm.

2 – FUNCTIONAL ANATOMY

Morphology of the levator ani muscle. Li D, Guo M. *Dis Colon Rectum.* 2007 Aug 16; *epub.* Previous studies have suggested that both the levator ani and the puborectalis muscles lift the anus. CT defecography in a sitting position shows that the levator ani is funnel-shaped at rest in the sitting position; it ascends, becoming plate-shaped during squeeze, and it descends, becoming basin-shaped during defecation. There is no muscle to lift the anus during defecation, the puborectalis lifting it during squeeze. The main function of the levator ani is to open the genital hiatus and the anus during defecation, the puborectalis shuts the genital hiatus and anus during squeeze.

Levator co-activation is a significant confounder of pelvic organ descent on Valsalva maneuver. Orno AK, Dietz HP. *Ultrasound Obstet Gynecol.* 2007;30:346. The Valsalva maneuver is used clinically and on imaging to determine pelvic organ prolapse, but is frequently accompanied by a pelvic floor muscle contraction. Levator co-activation may be a substantial confounder, reducing pelvic organ descent. Without repetition and digital, auditory or visual biofeedback, women may not perform a correct Valsalva maneuver. Biofeedback markedly reduces the likelihood of levator co-activation but does not abolish it completely.

Anal canal anatomy showed by three-dimensional anorectal ultrasonography. Regadas FS, Murad-Regadas SM, Lima DM et al. *Surg Endosc.* 2007 May 4; *epub.* 3-D anal endosonography enables measurement of the different anatomical structures of the anal canal and demonstrates its asymmetrical configuration. The shorter anterior external anal sphincter and internal anal sphincter associated with a longer gap (distance from the anterior external sphincter to the anorectal junction) can justify the higher incidence of pelvic floor dysfunction in females, especially fecal incontinence and anorectocele with rectal intussusception.

Effects and mechanisms of vaginal electrical stimulation on rectal tone and anal sphincter pressure. Song GQ, Zhu H, Chen JD. *Dis Colon Rectum.* 2007 Aug 14; *epub.* Vaginal electrical stimulation with long pulses or trains of long pulses but not trains of short pulses reduces rectal tone and increases anal sphincter pressure in conscious dogs. The inhibitory effect of vaginal electrical stimulation on rectal tone is mediated by the sympathetic pathway. These findings suggest that vaginal electrical stimulation may be a potential therapy for fecal incontinence.

Rectoanal sensorimotor response in humans during rectal distension. De Ocampo S, Remes-Troche JM, Miller MJ, Rao SS. *Dis Colon Rectum.* 2007 Aug 16; *epub.* Rectal perception, that facilitates maintenance of continence and defecation, is associated with motor changes in anorectum. Sensory and motor responses of the anorectum during rectal distention were examined, the sensorimotor response first occurring synchronously with the sensation of fullness or more often with the desire to defecate which is associated with a unique, consistent, and reproducible anal contractile response.

Role of phospholipase A2 in the genesis of basal tone in the internal anal sphincter smooth muscle. de Godoy MA, Rattan S. *Am J Physiol Gastrointest Liver Physiol.* 2007 Aug 23; *epub.* Phospholipase A2 plays a critical role in the genesis of tone in the internal anal sphincter and its inhibitors may provide potential therapeutic target for treating anorectal motility disorders.

3 – DIAGNOSTICS

Clinical and urodynamic parameters associated with history of urinary tract infections in women. Athanasiou S, Anstaklis A, Betsi GI et al. *Acta Obstet Gynecol Scand.* 2007;86:1130. Urodynamic testing does not help in identifying specific urogynecologic mechanisms that could improve medical and/or surgical management or prevent recurrent urinary tract infections.

Effect of anatomic urethral length on the correlation between the Q-tip test and descent at point Aa of the POP-Q system. Larrieux JR, Balgobin S. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007 Aug 9; *epub*. The objective of this study is to evaluate the effect of anatomic urethral length on the relationship between descent at point Aa of the pelvic organ prolapse quantification system and the Q-tip straining angle. Urethral length being measured with a urethral profilometer, a substantial correlation was found between descent at point Aa and the straining Q-tip angle, while there was no correlation between the anatomic urethral length and straining Q-tip angle. So urethral length does not affect the straining Q-tip angle, and point Aa is a strong predictor of an abnormal straining Q-tip angle in women with stage I anterior vaginal wall prolapse or greater.

Segmental colonic transit studies: comparison of a radiological and a scintigraphic method. Lundin E, Graf W, Garske U et al. *Colorectal Dis.* 2007;9:344. Colonic transit studies are used to diagnose slow transit constipation (STC) and to evaluate segmental colonic transit before segmental or subtotal colectomy. The aim of the study was to compare a single X-ray radio-opaque marker method with a scintigraphic technique (¹¹¹In-DTPA) to assess total and segmental colonic transit in patients with STC. Segmental colonic delay was a common finding. The two methods gave similar results for groups of patients, except in the descending colon. The variation of the results for individuals suggests that a repeated transit test may improve the assessment of total and segmental transit.

MR colonography. Kinner S, Lauenstein TC. *Radiol Clin North Am.* 2007;45:377. Combining the advantages of unsurpassed soft tissue contrast and lack of ionizing radiation, MR imaging of the gastrointestinal tract has become increasingly used clinically. Both bowel inflammation and tumor disease of the large bowel can be well visualized by means of MR colonography.

Nurse specialist led flexible sigmoidoscopy in an outpatient setting. Kelly SB, Murphy J, Smith A. *Colorectal Dis.* 2007 May 17; *epub*. Objective there has been an increasing demand for diagnostic flexible sigmoidoscopy. In order to improve our diagnostic services, we established a nurse specialist led flexible sigmoidoscopy clinic in 1999. A total of 3956 patients had a flexible sigmoidoscopy performed between 1999 and 2004. Two patients only sustained an iatrogenic rectal perforation. The nurse specialist offers an efficient diagnostic service for patients presenting with colorectal symptoms.

Digital rectal examination: national survey of undergraduate medical training in Ireland. Fitzgerald D, Connolly SS, Kerin MJ. *Postgrad Med J.* 2007;83:599. The experience gained in at least one digital rectal examination (DRE) by medical students by the completion of undergraduate training was assessed. No experience was reported in 24%, with mannequin-only experience in a further 20%, 56% performed DRE on at least one patient, but one third reported no confidence in their ability to interpret their findings properly.

4 – PROLAPSES

The natural history of posterior vaginal wall support after abdominal sacrocolpopexy with and without posterior colporrhaphy. Yau JL, Rahn DD, McIntire DD et al. *Am J Obstet Gynecol.* 2007;196:e45. For abdominal sacrocolpopexy with concomitant posterior colporrhaphy, POP-Q point Ap significantly improved and persisted at 34 months after surgery. Ten months after surgery, descent of POP-Q point Bp returned to preoperative levels and was the same regardless of whether a site-specific posterior colporrhaphy was performed at the time of an abdominal sacrocolpopexy.

Symptomatic Pelvic Organ Prolapse: prevalence and risk factors in a population-based, racially diverse cohort. Rortveit G, Brown JS, Thom DH et al. *Obstet Gynecol.* 2007;109:1396. To estimate the prevalence of and identify risk factors associated with symptomatic pelvic organ prolapse and level of distress in racially diverse women aged older than 40 years, the Reproductive Risks for Incontinence Study evaluated a population of 2,001 randomly selected women. Symptomatic prolapse was reported by 6% of women. Almost 50% of these reported moderate or great distress, and in 35% the symptoms affected at least one physical, social or sexual activity. In multivariable logistic regression analysis the risk of prolapse was significantly increased in women with vaginal deliveries compared with nulliparous women. Irritable bowel syndrome, constipation, and self-reported fair or poor health status were strongly associated with prolapse. African-American women were significantly less likely to report symptomatic prolapse compared with white women.

Functional outcome after transperineal rectocele repair with porcine dermal collagen implant. Smart NJ, Mercer-Jones MA. *Dis Colon Rectum.* 2007 Apr 9; *epub*. To assess the safety and efficacy of transperineal rectocele repair with porcine dermal collagen (Permacol (R)) 10 females were followed for 5-16 months with objective assessment for constipation, excessive straining, incomplete evacuation, vaginal bulging, and vaginal digitations (always, usually, occasionally, never) and Medical Outcomes Study Short Form 36 questionnaires. All patients had an improvement in two or more symptoms and 70 percent of patients in three or more symptoms. Improvements in digitations and SF-36 scores were not significant.

A novel technique for rectocele repair in elderly women. Nano M, Ferronato M, Solej M, D'Amico S. *Tech Coloproctol.* 2007 May 25; *epub*. The rectal wall was separated from the rectovaginal septum. The vaginal wall was divided in the middle. The first flap was sewn to the second and this onto the first. In 22 elderly women followed-up for 24-84 months the need to digitally assist evacuation disappeared.

Heterogeneity in anatomic outcome of sacrospinous ligament fixation for prolapse: a systematic review. Morgan DM, Rogers MA, Huebner M, Wei JT, Delancey JO. *Obstet Gynecol.* 2007;109:1424. To explore why failure rates vary so much between published reports of sacrospinous ligament fixation to correct POP and what the potential sources of heterogeneity may be, Medline was queried for studies between 1966 and 2005 and 187 studies were reviewed. The anterior compartment was the most common site of failure for any given grade. This was most striking when the criterion for failure was grade 1 (40.1% anterior, 11.0% apical, 18.2% posterior) or grade 2 prolapse (21.3% anterior, 7.2% apical, 6.3% posterior). Areas of vaginal support were more equally affected when the criterion for failure was grade 3 prolapse (3.7% anterior, 2.7% apical, 2.3% posterior). Among cohorts using grade 2 prolapse as the criterion for objective failure, the pooled measure of failure to relieve symptoms was 10.3% and to provide patient satisfaction was 13.0%. In conclusion the variation in published failure rates after sacrospinous ligament fixation is, in part, accounted for by differences in how anatomical outcomes are evaluated and which compartment of vaginal support is being considered.

Midline anterior repair alone vs anterior repair plus vaginal paravaginal repair: a comparison of anatomic and quality of life outcomes. Morse AN, O'dell KK, Howard AE. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18:245. A retrospective study to compare the anatomic recurrence rates and quality of life outcomes of patients who had undergone either anterior colporrhaphy or anterior colporrhaphy and vaginal paravaginal repair as part of surgery for pelvic organ prolapse did not suggest that adding paravaginal repair is superior in terms of anatomic or quality of life outcomes.

Mesh-related infections after pelvic organ prolapse repair surgery. Falagas ME, Velakoulis S, Iavazzo C, Athanasiou S. *Eur J Obstet Gynecol Reprod Biol.* 2007 Apr 23; *epub*. Although the use of vaginal meshes has become a new effective method of pelvic organ prolapse surgery clinicians should be aware of the various post-operative complications, including mesh-related infections. The incidence of mesh-related infections and erosion ranges from 0 to 8%, and 0 to 33%, respectively, in the published studies.

The PFD continues on page 111

3. Kamm MA. Obstetric damage and faecal incontinence. Lancet 1994; 344: 730-733.
4. Fynes M, Donnelly V, Beham M, et al. Effects of second vaginal delivery on ano-rectal physiology and faecal incontinence: Prospective study. Lancet. 1999; 354: 983-986.
5. Varma A, Gunn J, Gardinera A, et al. Obstetric anal sphincter injury: prospective evaluation of incidence. Diseases of colon and rectum. 1999; 42: 1537-1542.
6. Faltin DC, Sangalli MR, Curtin F, et al. Prevalence of anal incontinence and other ano rectal symptoms in women. International Urogynaecology Journal 2001; 12: 117-120.
7. Kiff ES, Barnes PR, Swash M. Evidence of pudendal neuropathy in patients with perineal descent and chronic straining at stool. GUT 1984; 25: 1279-1282.
8. Oberwalder M, Conner J, Wexner SD. Meta analysis to determine the incidence of obstetric anal sphincter damage. British Journal of Surgery 2003; 90: 1333-1337.
9. Poen AL, Felt-Bersma RJ, Strijers RL, et al. Third degree obstetric perineal tear: long term clinical and functional results after primary repair. British Journal of Surgery. 1998; 85: 1433-1438.
10. Gjessing H, Racke B, Sahlin Y. Third degree obstetric tears: outcome after primary repair. Acta Obstetricia and Gynecologica Scandinavia 1998; 77: 736-740.
11. Ench P, Bielefeldt K, Raschmann W, et al. Epidemiology of faecal incontinence in selected patient groups. Int Urogyn J 1991; 6: 143-146.
12. Reid R. Recto-enterocele repair - past problems and new horizons (review). Pelviperineology 2007; 26: 9-16.
13. De Lancey JOL. Structural supports of the urethra as it related to stress urinary incontinence: The Hammock Hypothesis. Am J Obstet Gynecol 1994; 170: 1713-1723.
14. Versi E, Cardozo LD, Studd JWW, Brincatt M, O'Dowell DJ. Internal urinary sphincter in maintenance of urinary continence. BMJ 1986; 292: 166-167.
15. Zaccharin RF. The anatomical supports of the female urethra. Obstets Gynaecology. 1969; 33: 754-759.
16. Last's Anatomy. Regional and applied. McMinn RMH. Churchill and Livingstone. Edinburgh, London, Melbourne, New York. 1990; 401-406.
17. Macchi V, Porzionato A, Stecco C, Benettazzo F, Stecco A, Portenti A, Dodi G, De Caro R. Histo-topographic study of the longitudinal anal muscle. Pelviperineology 2007; 26: 30-32.
18. Shafik A. A new concept of the anatomy of the anal sphincter mechanism and physiology of defaecation. XL11. Rectopuborectalis reflex. Coloproctology 1990; 12: 170-172.
19. Petros P. The internal continence society and integral theory systems for the management of the incontinent female - a comparative analysis. Pelviperineology 2007; 26: 25-29.
20. Bump RC, Matthiasson A, Bo K, et al. The standardization of terminology of female pelvic organ prolapse and pelvic floor dysfunction. Am J Obstet Gynecol 1996; 175: 10-17.
21. Davila GW, Beyer R, Moore R, DeRio S. Restoration of the vaginal apical and posterior support with Apogee system (Abstract). Int Urogynecology 2005; 16 (Supplement 2): 5118.
22. Jorge JM, Wexner SD. Etiology and management of fecal incontinence. Dis Colon Rectum 1993; 36: 77-97.
23. Stoker J, Halligan S, Bartram C. State of the art colon pelvic floor imaging. Radiology 2001; 218: 621-641.
24. Farnsworth B, Dodi G. Short IPGH system for assessment of pelvic floor disease. Pelviperineology 2007; 26: 73-77.

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Pelvic Floor Digest

continued from page 107

Prolapse repair by vaginal route using a new protected low-weight polypropylene mesh: 1-year functional and anatomical outcome in a prospective multicentre study. de Tayrac R, Devoldere G, Renaudie J et al. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18:251. A low-weight polypropylene mesh coated with a hydrophilic absorbable film for vaginal repair of genital prolapse (anterior, posterior and anterior-posterior repair) seems to decrease local morbidity (vaginal erosions 6.3%, de novo dyspareunia 12.8%) while maintaining low recurrence rates (6.8% for cystocele and 2.6% for rectocele). The report is based on the analysis of the first 143 patients of a multicentre study evaluated after at least 10 months follow-up. The improvement of Pelvic Floor Distress Inventory and Pelvic Floor Impact Questionnaire were highly significant.

Changes in the extracellular matrix in the anterior vagina of women with or without prolapse. Lin SY, Tee YT, Ng SC et al. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18:43. To investigate the changes in the connective tissues (collagen type I, III, IV, V, VI, elastin, and glycoproteins) located in the upper portion of the anterior vaginal wall associated with prolapse, in 23 women with prolapse an immunohistochemical study demonstrated that collagen III is significantly less than in a control group with a positive correlations with ageing.

Vaginal mesh erosion after transvaginal repair of cystocele using Gynemesh or Gynemesh-Soft in 138 women: a comparative study. Deffieux X, de Tayrac R, Huel C et al. *Int Urogynecol J Pelvic Floor Dysfunct.* 2007;18:73. In 138 women follow-up for 7-60 months cystocele repair was performed according to the technique of tension-free polypropylene mesh. Anatomically, the success rate was 95%. Vaginal erosion was reported in 20% of the patients with no statistically significant difference between Gynemesh and Gynemesh-Soft meshes. Cystocele stage >2 HWS is a protective factor against vaginal erosion. A partial excision of the mesh was necessary in 13/27 symptomatic patients (48%), associated with a vaginal mucosal closure, 2/27 underwent a complete excision. The incidence of de novo dyspareunia was 9% in patients with vaginal erosion and 11% in patient without erosion.

A prospective, randomised, controlled trial comparing 3 hour and 24 hour postoperative removal of bladder catheter and vaginal pack following vaginal prolapse surgery. Glavind K, Morup L, Madsen H, Glavind J. *Acta Obstet Gynecol Scand.* 2007;86:1122. The aim of this prospective randomised study was to determine whether or not there was a higher incidence of bleeding, reoperation, urinary retention or bacterial count in the urine depending on whether urinary catheter and vaginal pack were removed 3 or 24 h after prolapse surgery. Pack and catheter removal after 3 h is recommended with careful monitoring of the patient's voiding.

Robot-assisted vs. conventional laparoscopic rectopexy for rectal prolapse: a comparative study on costs and time. Heemskerk J, de Hoog DE, van Gemert WG et al. *Dis Colon Rectum.* 2007 Aug 10; epub. Robot-assisted laparoscopic rectopexy is a safe and feasible procedure, but results in increased time and higher costs than conventional laparoscopy.

Stapled hemorrhoidopexy and Milligan Morgan hemorrhoidectomy in the cure of fourth-degree hemorrhoids: long-term evaluation and clinical results. Mattana C, Coco C, Manno A et al. *Dis Colon Rectum.* 2007 Aug 16; epub. Long follow-up seems to indicate more favorable results in Milligan-Morgan procedure compared to stapled hemorrhoidopexy (mean follow-up 92 and 54 months respectively) in terms of resumption of symptoms and risk of recurrence.

The PFD continues on page 112

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Pelvic Floor Digest

continued from page 111

5 – RETENTIONS

Postoperative urinary retention after primary colorectal cancer resection via laparotomy: a prospective study of 2,355 consecutive patients. Changchien CR, Yeh CY, Huang ST. *Dis Colon Rectum.* 2007 Aug 18; *epub.* Risk factors for postoperative urinary retention after colorectal cancer surgery are: male gender, age, lung disease, rectal cancer, longer operation duration, and additional pelvic procedure.

Causes of failed urethral botulinum toxin A treatment for emptying failure. Liao YM, Kuo HC. *Urology.* 2007 Aug 17; *epub.* Urethral injection of BTX-A can reduce urethral resistance in patients with voiding dysfunction. However some patients do not benefit from this treatment. The causes of failed treatment in 23/200 patients were detrusor underactivity with very low abdominal straining pressure in 7, a tight urethral sphincter in 7, bladder neck obstruction in 7, and psychological inhibition of voiding in 2. Transurethral incision of the bladder neck was performed in 7 patients, and all had an improved result.

Evaluation of constipation by abdominal radiographs correlated with treatment outcome in children with dysfunctional elimination. Allen HA, Austin JC, Boyt MA et al. *Urology.* 2007;69:966. No correlation between any uroflowmetry parameter and the presence of fecal distention of rectum could be demonstrated, nor a statistical significance between fecal distention of rectum on abdominal radiograph and outcome of wetting symptoms was established.

A novel three-dimensional dynamic anorectal ultrasonography technique (echodefecography) to assess obstructed defecation, a comparison with defecography. Murad-Regadas SM, Regadas FS, Rodrigues LV et al. *Surg Endosc.* 2007 Aug 20; *epub.* Echodefecography may be used as an alternative method to assess patients with obstructed defecation as it has been shown to detect the same anorectal dysfunctions (anorectocele and rectal intussusception) observed in conventional defecography. It is minimally invasive, well tolerated, inexpensive, avoids exposure to radiation, and clearly demonstrates all the anatomic structures involved with defecation.

6 – INCONTINENCES

Anatomic restoration technique of continence mechanism and preservation of puboprostatic collar: a novel modification to achieve early urinary continence in men undergoing robotic prostatectomy. Tewari AK, Bigelow K, Rao S. *Urology.* 2007;69:726. The complex of puboprostatic ligaments, puboperinealis muscle, and arcus tendineus (acting in unison to provide continence in men and women) can be disrupted during robotic prostatectomy. The preservation of the puboprostatic collar helped to restore early continence in 50 men undergoing robotic prostatectomy for clinically localized prostate cancer. The ligaments were reconnected to the urethrovesical anastomosis, reapproximated the muscles and fixed the distal bladder to the arcus tendineus. The average additional time was only 2 to 5 minutes, and the continence rate was 29% in the first week and 95% in 16 weeks after catheter removal.

Anal sphincter laceration at vaginal delivery: is this event coded accurately? Brubaker L, Bradley CS, Handa VL et al. *Obstet Gynecol.* 2007;109:114.

Effectiveness of a new self-positioning pessary for the management of urinary incontinence in women. Farrell SA, Baydock S, Amir B, Fanning C. *Am J Obstet Gynecol.* 2007;196:474. The Uresta, a new self-positioning women's incontinence pessary, significantly reduces urinary incontinence and is easy for women to use.

The PFD continues on page 120