Patients Identified at Lower Risk for Adenocarcinoma on a Histologic Basis

To evaluate whether persistence of nondysplastic Barrett’s esophagus (NDBE) over multiple consecutive surveillance endoscopic evaluations could be used in risk stratification of patients with Barrett’s esophagus (BE), a multi-center outcomes study of a large cohort of patients with BE was carried out. Based on the number of consecutive surveillance endoscopies showing NDBE, five groups of patients were identified. Group One was found to have NDBE at their first EGD. Patients in Group Two were found to have NDBE on their first two consecutive EGDs. Patients in Groups Three, Four, and Five were found to have NDBE on three, four, and five consecutive surveillance EGDs.

A logistic regression model was built to determine whether persistence of NDBE independently protected against development of cancer.

A total of 3515 patients with BE were evaluated; 1401 patients met the inclusion criteria (93.3% white, 87.5% men, median age 60 years). The median follow up period was 5 years. The annual risk of EAC (endoscopic adenocarcinoma) in Groups One to Five was 0.32%, 0.27%, 0.16%, 0.2% and 0.11%, respectively. After adjusting for age, sex, and length of BE, persistence of NDBE, based on multiple surveillance endoscopy was associated at a gradually lower likelihood of progression to EAC.

Persistence of NDBE over several endoscopic examinations identifies patients who are at low risk of development of EAC, supporting lengthening surveillance intervals or discontinuing surveillance of patients with persistent NDBE.


Endoscopic Versus Surgical Treatment for Pancreatic Pseudocysts

Surgery is the standard technique for drainage of pancreatic pseudocysts. A single-center, open-label, randomized trial to compare endoscopic and surgical cystogastrostomy for pancreatic pseudocyst drainage was carried out with 20 patients treated endoscopically and 20 patients treated surgically. The primary endpoint was pseudocyst recurrence after a 24-month follow up period. Secondary endpoints were treatment success or failure, complications, re-interventions, length of hospital stay, physical and mental health scores, and total cost.

At the end of the follow up period, none of the patients who received endoscopic therapy had a pseudocyst recurrence, compared with one patient treated surgically. There were no differences in treatment successes, complications, or reintervention between the groups. The length of hospital stay was shorter for patients who underwent the endoscopic approach (median 2 days vs. 6 days in the surgical group).

There were no differences in physical component scores and mental health component scores between groups at baseline on the medical outcome study (36 item, short-form general survey questionnaire). Longitudinal analysis showed significantly better physical component and mental health component scores for the endoscopic treatment group. The total mean cost was lower for patients managed by endoscopy than surgery ($7,011 vs. $15,052).

It is concluded that in a randomized trial, comparing endoscopic and surgical cystogastrostomy for pancreatic pseudocyst drainage, none of the patients in the endoscopy group had pseudocyst with recurrence during the follow up period. Therefore, there is no evidence that surgical cystogastrostomy is superior. Endoscopic treatment was associated with shorter hospital stays, better physical and mental health of the patients and lower cost.


Bloating and Distention and Irritable Bowel Syndrome

Bloating and distention are often attributed to dietary factors by patients with irritable bowel syndrome (IBS). To examine the effects of gas production and visceral hypersensitivity on digestive symptoms after lactose ingestion in a population with lactose deficiency, 277 IBS patients and 64 healthy controls (HCs), underwent a 20-gram lactose hydrogen breath test (LHBT) with evaluation of hydrogen gas production and lactose intolerance (LI) symptoms. Abdominal distention was measured during LHBT. Rectal sensitivity was assessed by barostat studies.

Hydrogen production and distention were similar
in IBS patients and HCs during LHBT. However, LI was more frequent in IBS (53.8% vs. 28.1%), especially bloating (39% vs. 14%) and borborygmi (39% vs. 21.9%). Only 59% of patients with bloating had distention. No correlation was observed between girth increment and bloating. IBS patients had lower rectal sensory thresholds. Multivariate analysis indicated that hydrogen production increased bloating (OR 2.19), and borborygmi (12.37), but not distention. Visceral hypersensitivity was associated with bloating (OR 6.6) and total symptom score (OR 3.78).

Hydrogen production and visceral hypersensitivity both contribute to digestive symptoms, especially bloating and borborygmi in IBS patients after lactose ingestion. Objective abdominal distention is not correlated with subjective bloating.


**Postgastrectomy Endoscopic Submucosal Dissection for Early Gastric Cancer**

This technically difficult procedure because of limited working space in a remnant stomach post gastrectomy was evaluated, including results and long-term outcomes to determine the feasibility and effectiveness of this procedure utilizing retrospective information. The procedure is difficult because of the presence of severe gastric fibrosis and staples under the suture line. This was carried out at the National Cancer Center Hospital in Tokyo, Japan from 1997 to 2011.

The patient characteristics, endoscopic findings, technical results, adverse events and histopathologic results, including curability and evaluation of H. pylori gastritis in addition to the rates of local recurrence, metachronous gastric cancer, overall survival and cause-specific survival.

A total of 128 consecutive patients with 139 lesions had previously undergone 87 distal (68%), 25 proximal (19.5%), and 16 pylorus-preserving gastrectomies (12.5%). The median period from the original gastrectomy to the subsequent ESD for EGC in the remnant stomach was 5.7 years. The median tumor size was 13 mm and the median procedure time was 60 minutes. There were 131 en bloc resections (94%), with curative resections achieved for 109 lesions (78%), 22 lesions (16%) resulted in noncurative resections and 8 lesions (6%) had only a horizontal margin positive, or had inconclusive results.

A total of 118 patients (92%), were assessed as H. pylori-positive with 7 patients (5%) negative. Adverse events included 2 cases of delayed bleeding (1.4%), and 2 perforations (1.4%), with one patient requiring emergency surgery. The 5-year overall and cause-specific survival rates were 87.3% and 100%, respectively during a median follow up period of 4.5 years, with no deaths from EGC in the remnant stomach.

It was concluded that ESD for EGC in the remnant stomach of patients after gastrectomy was a feasible and effective therapeutic method and should become the standard method in such cases, based on the favorable long-term outcomes.


**Diagnosing Pancreatic Carcinoma without CT Evidence of Mass**

Diagnosis of pancreatic neoplasm is difficult in patients with inconclusive findings on CT scan and other imaging. To determine the diagnostic accuracy and to determine predictors of pancreatic neoplasm by EUS with FNA in this setting, a retrospective chart review was carried out between January 2002 to December 2010 at a tertiary referral center of 1046 patients who underwent pancreatic EUS. A total of 116 patients were selected because their clinical presentation was suspicious for pancreatic malignancy, but multidetector row CT (MDCT) findings were inconclusive.

With surgical pathology or subsequent clinical course used as the criterion standard, EUS with FNA had a sensitivity, specificity, positive predictive value and accuracy of 87.3%, 98.3%, 98.5%, and 92.1%, respectively in diagnosing a pancreatic neoplasm that was indeterminate on imaging studies. Factors significantly associated with EUS detection of pancreatic ductal adenocarcinoma were total bilirubin level greater than 2 mg/dL, CT findings of pancreatic duct dilation, bile duct stricture, and tumor size 1.5 cm or larger detected by EUS.

Among them, pancreatic duct dilation on CT (continued on page 68)
(continued from page 66)

(OR 4.1), and tumor size 1.5 larger detected by EUS were independent risk factors.

When imaging studies are indeterminate, EUS is a highly sensitive and accurate modality for the detection of pancreatic neoplasm, especially when the tumor is smaller than 2.0 cm.


Narrow Band Imaging Predicting Histology of Distal Diminutive Polyps

To assess whether NBI is able to predict colonoscopic surveillance intervals and histology of distal diminutive polyps according to the ASGE criteria, a prospective, multicenter study at five endoscopy centers was carried out on consecutive patients undergoing colonoscopy. The endoscopists involved were required to pass a before-study, qualifying examination and histology of polyps that were less than 10 mm were predicted at NBI and assigned a designation of high or low confidence.

Accuracy of high-confidence NBI prediction for polyps 5 mm or less and predicting surveillance intervals and negative predictive value (NPV) for adenomatous histology in the rectosigmoid colon were compared with the ASGE thresholds.

A total of 278 patients, mean age 63 years and 58% male were enrolled at colonoscopy. A total of 574 polyps less than 10 mm and 429 of which were 5 mm or less were followed, 60% adenomatous were retrieved for histologic analysis. Sensitivity, specificity, positive and negative predictive values and accuracy of high-confidence NBI predictions for adenomatous histology in lesions 5 mm or less were 90%, 88%, 89%, 89%, and 89%, respectively.

High-confidence characteristic polyps 5 mm or less predicted the correct surveillance intervals in 92 to 90% of cases, according to American and European guidelines. NPV of high confidence NBI for adenomatous histology for the rectosigmoid colon lesions equal to or less than 5 mm was 92%. These findings were limited to experienced endoscopists.

It was concluded that high-confidence prediction of histology for polyps 5 mm or less appears to be sufficiently accurate to avoid post-polypectomy histologic examination of the resected lesions as well, to allow rectosigmoid hyperplastic polyps to be left in place without resection.


Treatment of Diabetic and Idiopathic Gastroparesis

The relationship between symptom improvement (SI) and acceleration of gastric emptying (GE) for different drugs used in the treatment of idiopathic and diabetic gastroparesis is uncertain. The study-specific correlations between SI and GE were examined and a meta-regression analysis of the association of across multiple studies was performed. Medline database from 1946 to present was searched and only control trials or trials with an established effector comparator that completed both SI and GE were included.

Studies were identified for metoclopramide (N = 6), domperidone (N = 6), cisapride (N = 14), erythromycin (N = 3), botulinum toxin (N = 2), and levosulpiride (N = 3). Even though most drugs concomitantly improve symptoms and accelerated GE, no study reported a significant correlation between SI and GE. Moreover, a correlation analysis of all studies using meta-regression did not show a significant relationship between SI and GE.

There were inconsistencies in study methods representing a limitation, but suggested that the findings were robust to methodological factors.

It is concluded that this review identified no evidence of a relationship between SI and GE for different drugs used for the treatment of gastroparesis.


Murray H. Cohen, D.O., “From the Literature” Editor, is on the Editorial Board of Practical Gastroenterology.

www.practicalgastro.com
COLOWRAP LAUNCHES NOVEL, NON-INVASIVE ABDOMINAL BINDER TO REDUCE LOOPING DURING COLONOSCOPY

Over 320 US Gastroenterologists Have Now Used New Looping Solution

DURHAM, NC – Despite numerous technological advances over recent decades, looping of the colon remains an all-too-frequent complication of colonoscopy. ColoWrap aims to change that. At the American College of Gastroenterology conference, held Oct. 11-16, 2013, in San Diego, the Company launched its new ColoWrap Colonoscopy Binder. And as of November 11, ColoWraps have reached the hands of over 320 US gastroenterologists.

ColoWraps are innovative, new, single-use abdominal binders that help prevent looping during colonoscopy. The simple, non-invasive ColoWraps provide firm, consistent pressure to the patient’s lower abdomen, allowing the scope to pass easily through the loop-prone sigmoid colon. Use of a ColoWrap has been shown to reduce insertion time and essentially eliminate the need for manual compression and patient re-positioning, two commonly employed measures for correcting looping. This translates into a colonoscopy that is safer, easier, and more comfortable for patients and healthcare providers alike.

The device’s patent-pending design was developed with guidance from Dr. Marybeth Spanarkel, a gastroenterologist with over 25 years of experience. “The response we’ve been getting from physicians, nurses, and even patients has been very positive,” said James Hathorn, ColoWrap CEO and Co-Founder. “Looping during colonoscopy is a real problem, and based on the feedback we’ve received, our customers have found ColoWrap to be an intuitive, effective solution.”

The ColoWrap launch comes on the heels of a successful 176-patient pilot study, in which the use of the ColoWrap was associated with:

• 28.3% reduction in mean insertion time (3.8 vs. 5.3min, p < 0.001)
• 89.7% reduction in need for manual abdominal compression (7% vs. 68%, p < 0.001)
• 93.5% reduction in need for patient re-positioning (2% vs. 31%, p <0.001).

The Company plans to conduct further research, including a 300-patient study at the University of North Carolina, Chapel Hill, beginning late this fall.

About ColoWrap, LLC

ColoWrap is committed to reducing the incidence and impact of colorectal cancer by improving the experience of colonoscopy for patients and healthcare providers. Based in Durham, NC, the Company’s namesake product, the ColoWrap Colonoscopy Binder is an innovative, non-invasive, single-use abdominal binder that helps preventing looping during colonoscopy.

For more information, please visit: www.colowrap.com or call 919-451-1803

Study Shows WATS3D Biopsy Increases Detection of Pre-Cancer in the Esophagus by 50% in Post-Ablation Patients

Data Underscores Value of Using WATS3D as a Surveillance Tool for Residual or Recurrent Pre-Cancer

SAN DIEGO, CA – CDx Diagnostics announced today that a new study adds to the growing body of evidence supporting the use of Wide Area Transepithelial Sampling with 3-Dimensional analysis (WATS3D) as a surveillance tool in patients who have received ablation therapy for Barrett’s esophagus. Researchers from Temple University School of Medicine presented the new data at the American College of Gastroenterology Annual Scientific Meeting and Postgraduate Course, taking place from October 11-16, 2013 in San Diego.

The WATS3D biopsy collects a wide area, disaggregated tissue specimen of the entire thickness of the epithelium being tested. This unique tissue specimen is then subjected to specialized, computer-assisted 3-dimensional analysis to identify potentially (continued on page 72)
abnormal cells for presentation to a specially trained GI pathologist.

The study (Abstract number P23) “Wide Area Transepithelial Sampling (WATS3D) Improves Detection Of Residual Or Recurrent Intestinal Metaplasia Within The Tubular Esophagus And Squamocolumnar Junction” found that use of WATS3D, in combination with forceps biopsies, increased the detection rate of precancerous tissue by 50%. The authors concluded that WATS3D provides critically important information that improves the management of patients who already underwent therapy to eradicate previously diagnosed Barrett’s esophagus. This precancerous condition results from prolonged damage to the esophagus related to reflux of stomach contents.

“In addition to reinforcing previous findings demonstrating the value of using WATS3D as a surveillance tool in patients who have received ablation therapy, this study also provides new information about its utility to detect metaplasia in the tubular esophagus,” said Michael S. Smith, M.D., M.B.A., Medical Director of the Esophageal Program and Assistant Professor of Medicine at Temple University School of Medicine. “Research to date has shown that, following ablation of Barrett’s esophagus, most residual or recurrent pre-cancerous cells are found at the squamocolumnar junction, where the bottom of the esophagus and the stomach come together. WATS3D not only increased detection of the precancerous cells at this location, but also found them higher in the esophagus where there is a lot of tissue not sampled by conventional forceps biopsies. The ability to better detect these abnormal cells before they have a chance to progress to cancer will help us to improve the care we provide to our Barrett’s patients.”

In the study, 33 patients with visually eradicated long-segment Barrett’s esophagus underwent surveillance endoscopy. Residual or recurrent intestinal metaplasia was detected on either forceps biopsy or WATS3D in 12 cases (36.4%). In 6 of these cases, the intestinal metaplasia only was found using WATS3D and not with forceps biopsies. While in 5 cases the intestinal metaplasia was found at the squamocolumnar junction, in 1 case the intestinal metaplasia was present at least 3 cm proximal to the top of the stomach. In a seventh case, both WATS3D and forceps biopsies identified intestinal metaplasia. However, forceps biopsies found only non-dysplastic metaplasia while WATS3D showed high grade dysplasia, only one step from cancer.

About Barrett’s Esophagus and Esophageal Cancer
Many cases of esophageal adenocarcinoma (EA) are preceded by chronic heartburn. Some heartburn patients develop altered cell patches in their esophagus. A condition known as dysplasia occurs as Barrett’s esophagus progresses to Barrett’s-associated cancer. Dysplasia is considered a precancerous condition and should be monitored very closely to ensure the cells do not become cancerous. Dysplastic cells are very similar to cancer cells but have not yet acquired the ability to invade into tissue or metastasize. Esophageal cancer is now the fastest growing form of cancer in the U.S.

About CDx Diagnostics and the WATS3D Biopsy
CDx Diagnostics’ mission is to provide doctors with the most powerful diagnostic technology to help prevent cancer before it can start.

CDx Diagnostics’ WATS3D biopsy addresses the sampling error inherent in random forceps biopsy testing of the esophagus. In just a few minutes, gastroenterologists can easily obtain a wide area, full-thickness transepithelial tissue sample for computer-assisted 3D laboratory analysis. In clinical trials, adjunctive use of CDx Diagnostics’ WATS3D biopsy significantly increased the detection rate of both Barrett’s esophagus and esophageal dysplasia. The high sensitivity of WATS3D is due to the large tissue area sampled, and the proprietary 3-Dimensional computer imaging system that is based on an algorithm developed as part of the U.S. Strategic Defense Initiative missile defense program.

To learn more about WATS3D, visit: www.cdxdiagnostics.com

(continued on page 74)
BroadcastMed Network Expands Digital Library Featuring Leading Physicians and Medical Centers

FARMINGTON, CT – BroadcastMed, Inc. announced expansion of the BroadcastMed Network's extensive digital library. The library offers open access to medical procedures and advances from world-renowned physicians and healthcare organizations. The BroadcastMed Network receives more than 2 million visits annually and since the October 1 launch of its specialty-specific syndication channels, traffic has increased 48%.

Available by visiting broadcastmed.com, the digital library of content consists of ORLive.com, 17 specialty-specific syndication channels including cardiology, gastroenterology, oncology and orthopedics and more than 40 affiliate channels. Affiliate channels include content curated by organizations like UPMC, Brigham and Women’s Hospital, St. David’s HealthCare, The University of Alabama at Birmingham (UAB) Health System, University of Maryland Medical Center, Wake Forest Baptist Health, Medtronic, Stryker, Covidien, and Depuy Orthopedics.

“We are working with top-tier experts every day to expand knowledge and provide access to a range of trusted educational content, from minimally invasive surgeries and new technology applications to live events and continuing medical education,” said Peter Gailey, President and Co-Founder, BroadcastMed. “What sets the BroadcastMed Network apart is its streamlined access to a curated library of content that doctors and healthcare professionals can use to positively impact the health and well-being of patients everywhere.”

Featured this Month on the BroadcastMed Network:
Endoscopic Management of Upper GI Bleeding, Dr. David Carr-Locke, Continuum Health Partners this presentation, available for CME credit, will review the current state of assessment and treatment of upper gastrointestinal bleeding with a focus on endoscopic techniques. More information is available by visiting the Continuum site.

Key features of the BroadcastMed Network include open access to an extensive library of procedures, technologies and insights as well as optimized search functionality and social media sharing tools. All videos on BroadcastMed Network specialty channels feature synchronized closed captioning allowing for laser-focused, convenient search.

About BroadcastMed
BroadcastMed is a digital medical broadcasting company. We help the World’s leading hospitals, medical device and medical education companies create and distribute trusted educational content to physicians, allied healthcare professionals and patients. Our clients rely on us to deliver measureable results by expanding their reach through the BroadcastMed Network. The Network includes affiliated broadcast channels feature educational content from some of the world’s top hospitals and physician experts. Also among the BroadcastMed Network affiliates is ORLive.com, a leading digital destination for physicians.

For more information visit: www.broadcastmed.com
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<table>
<thead>
<tr>
<th>Company</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>AbbVie, Inc.</td>
<td>Humira ................................................... Cover 2, 1-4</td>
</tr>
<tr>
<td>Bayless Book</td>
<td>.......................................................... 73</td>
</tr>
<tr>
<td>Beutlich LP, Pharmaceuticals</td>
<td>HurriCaine ONE ............................................ 59</td>
</tr>
<tr>
<td>Bracco</td>
<td>.......................................................... 63</td>
</tr>
<tr>
<td>Braintree Laboratories, Inc.</td>
<td>SuPrep ......................................................25, 26</td>
</tr>
<tr>
<td>CCA Alliance</td>
<td>.......................................................... 71</td>
</tr>
<tr>
<td>CRH Medical Corporation</td>
<td>..................................................Cover 4</td>
</tr>
<tr>
<td>Commonwealth Laboratories, Inc.</td>
<td>Breath Testing ................................................Cover 3</td>
</tr>
<tr>
<td>Ferndale Healthcare, Inc.</td>
<td>.......................................................... 67</td>
</tr>
<tr>
<td>Given Imaging</td>
<td>..........................................................33, 41, 45</td>
</tr>
<tr>
<td>Hepatitis Foundation</td>
<td>.......................................................... 69</td>
</tr>
<tr>
<td>HMB Endoscopy Products</td>
<td>.......................................................... 77</td>
</tr>
<tr>
<td>Imedex</td>
<td>.......................................................... 49</td>
</tr>
<tr>
<td>Janssen Biotech, Inc.</td>
<td>Simponi .......................................................... 9-15</td>
</tr>
<tr>
<td>Konsyl Pharmaceuticals, Inc.</td>
<td>Sitzmarks .......................................................... 51</td>
</tr>
<tr>
<td>Prometheus</td>
<td>.......................................................... 37</td>
</tr>
<tr>
<td>Quintron</td>
<td>Breath Testing .................................................. 55</td>
</tr>
<tr>
<td>Shire US</td>
<td>Pentasa .......................................................... 29, 30</td>
</tr>
<tr>
<td>SGNA</td>
<td>.......................................................... 75</td>
</tr>
<tr>
<td>Takeda Pharmaceuticals USA, Inc.</td>
<td>Vedolizumab .................................................. 7</td>
</tr>
</tbody>
</table>

Although every effort has been made to ensure the accuracy of this index, we cannot absolutely guarantee against the eventuality of last minute changes or omissions.

**NAME**

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MEETINGS CALENDAR

December 12-14, 2013 Advances in Inflammatory Bowel Diseases, Crohn’s & Colitis Foundation’s Clinical & Research Conference
Westin Diplomat Resort & Convention Center, Hollywood, FL – Advances in IBD is the premier conference for healthcare professionals and researchers who study and manage patients with inflammatory bowel diseases. Endorsed by the ACG, AGA, and NASPGHAN, this three-day conference offers exciting workshops and a two-track format designed for clinicians, researchers, allied health professionals, nurses, and pediatric gastroenterologists. Located beachside at the Westin Diplomat in Hollywood, Florida, this is the educational get-away worth attending. For more information visit: http://advancesinibd.com
For registration inquiries: Tel.: 855-276-6855
Email: registration@imedex.com

Program Approved for AMA PRA Category 1 Credit(s)™
New York Marriott Marquis Hotel, New York, NY
Preliminary Topics Include:
- Impact of the Affordable Care Act on Endoscopic Practice
- Controversies in Endoscopic Treatment of Nondysplastic Barrett’s Esophagus
- Pancreatic Cystic Lesions
- Real-Time Histology
- Endoscopic Ultrasound of Submucosal Lesions
- Avoiding and Managing Endoscopic Complications
- Advanced Endoscopic Imaging
- EMR and ESD of Colonic Lesions
Visit: www.NYSGE.org or Contact us at: info@nysge.org

May 17-21, 2014 ASCRS 2014 Annual Scientific Meeting
Westin Diplomat Resort & Convention Center, Hollywood, FL – The American Society of Colon & Rectal Surgeons is the premier society for colon and rectal surgeons and other surgeons dedicated to advancing the science and treatment of diseases and disorders affecting the colon, rectum and anus. More than 1,000 of the Society’s 3,000 physician members are certified by the American Board of Colon and Rectal Surgery. The ASCRS Annual Scientific Meeting is the leading event in the field of colon and rectal surgery and more than 1,700 colorectal specialists are expected to attend. The meeting will include oral and poster presentations, expert panels, symposia, meet the professor breakfasts and many other sessions encouraging audience participation. For more information, visit: www.fascrs.org/annual_meeting
ACROSS
1. It plays a critical role in the diagnosis and treatment of IBD
8. Abnormal passage leading from a suppurating cavity to the body surface
9. Series of X-rays (2 words)
12. Blueprint
13. Congenital
15. Benign growth
18. OR activity, for short
21. Nucleoside that is formed when hypoxanthine is attached to a ribose ring
24. Lamina ___
26. Principal

DOWN
1. Drug used to treat Crohn’s disease
2. Red dye used as a stain
3. Hard outer layer
4. Toxic metal
5. ___peptide
6. Drain of energy
7. Situated in the rump area
10. Room, abbr.
11. Type of address on the net
14. Stomach muscles, in slang
16. Make a sharp explosive noise
17. Condition of abatement of a disease
19. Alternative therapy for gastrointestinal disorders
20. Two of a kind
22. Virus that can cause cancer
23. It’s used to cool
24. Fasten
25. Nurse, abbr.
27. “All systems go” (2 words)
29. Light brown
30. Takes in
32. Letters on a pencil
33. Brown-yellowish color
34. Compound from ammonia
35. ____ tissue
38. Hassle
39. Nasonex and prednisone, for example
40. Procedure
41. Stains
42. Respectful title

(Answers on page 62)